

# **COMMISSIONING TEST & RECORD SHEETS**



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**1. COMMISSIONING TEST SHEETS****1.1 Relay identification**

Commissioning date : \_\_\_\_\_

Engineer : \_\_\_\_\_

Substation : \_\_\_\_\_

Circuit : \_\_\_\_\_

Network nominal frequency: \_\_\_\_\_

MiCOM Overcurrent relay model : ☐ P120 ☐ P121 ☐ P122 ☐ P123

Serial number : \_\_\_\_\_

Rated current In : \_\_\_\_\_

Auxiliary voltage Uaux : \_\_\_\_\_

Communication protocol : \_\_\_\_\_

Language : \_\_\_\_\_

**1.2 Commissioning test record**

(put a cross after each checked stage)

Serial number check ?

☐

All current transformer shorting switches closed ?

☐

Wiring checked against diagram (if available) ?

☐

Case earth installed ?

☐

Test block connections checked (if installed) ?

☐

Insulation tested ?

☐**Auxiliary supply control**

Auxiliary voltage to relay

☐

Auxiliary voltage value

\_\_\_\_\_ Vdc/Va

Watchdog contacts

☐

With auxiliary supply off

Terminals 35 and 36

☐

With auxiliary supply on

Terminals 35 and 36

☐

**Measurements**

	Applied value	Relay value
<b>PHASE CT INPUT</b>		
Phase A current	_____ A	_____ A
Phase B current	_____ A	_____ A
Phase C current	_____ A	_____ A
<b>EARTH CT INPUT</b>		
Earth current	_____ A	_____ A

**Phase protection test**

	Theoretical value	Relay value
$I >$ threshold	_____ A	
$I >$ threshold		_____ A
$I >$ drop threshold		_____ A
<b>Time delay</b>		
Time delay at $2 \times I >$	_____ ms	_____ A
Time delay at $10 \times I >$	_____ ms	_____ A
$I >>$ threshold	_____ A	
$I >>$ threshold		_____ A
$I >>$ drop threshold		_____ A
<b>Time delay</b>		
Time delay at $2 \times I >>$	_____ A	_____ A
Time delay at $10 \times I >>$	_____ A	_____ A

**Earth protection test**

	Theoretical value	Relay value
$I_e >$ threshold	_____ A	
$I_e >$ threshold		_____ A
$I_e >$ drop threshold		_____ A
<b>Time delay</b>		
Time delay at $2 \times I_e >$	_____ ms	_____ ms
Time delay at $10 \times I_e >$	_____ ms	_____ ms
$I_e >>$ threshold	_____ A	
$I_e >>$ threshold		_____ A
$I_e >>$ drop threshold		_____ A
<b>Time delay</b>		
Time delay at $2 \times I_e >>$	_____ ms	_____ ms
Time delay at $10 \times I_e >>$	_____ ms	_____ ms

**Commissioning Engineer****Date**

\_\_\_\_\_

\_\_\_\_\_

## 2. COMMISSIONING SETTING RECORD SHEETS

### 2.1 MiCOM P120 commissioning setting record sheets

#### 2.1.1 OP PARAMETERS Menu

Password : \_\_\_\_\_

Reference : \_\_\_\_\_

Frequency : ☐ 50 Hz ☐ 60 Hz

#### 2.1.2 CONFIGURATION Menu

##### 2.1.2.1 Display

E/Gnd text	<input type="checkbox"/> N	<input type="checkbox"/> E	<input type="checkbox"/> G
------------	----------------------------	----------------------------	----------------------------

##### 2.1.2.2 CT Ratio

E/Gnd CT Primary	Primary CT ratio	
E/Gnd CT Secondary	Secondary CT ratio	<input type="checkbox"/> 1 A <input type="checkbox"/> 5 A

##### 2.1.2.3 LEDs 5 to 8 configuration

Functions	LED 5		LED 6		LED 7		LED 8	
$I_{e>/l>}$	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$tl_{e>/tl>}$	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_{e>>/l>>}$	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$tl_{e>>/tl>>}$	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_{e>>>/l>>>}$	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$tl_{e>>>/tl>>>}$	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO

#### 2.1.3 COMMUNICATION Menu

##### 2.1.3.1 COMMUNICATION Menu (MODBUS)

Communication ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Baud Rate	<input type="checkbox"/> 300 bds	<input type="checkbox"/> 600 bds
	<input type="checkbox"/> 1.200 bds	<input type="checkbox"/> 2.400 bds
	<input type="checkbox"/> 4.800 bds	<input type="checkbox"/> 9.600 bds
	<input type="checkbox"/> 19.200 bds	<input type="checkbox"/> 38 400 bds
Parity	<input type="checkbox"/> Odd	<input type="checkbox"/> Even <input type="checkbox"/> None
Data bits	<input type="checkbox"/> 7	<input type="checkbox"/> 8
Stop bits	<input type="checkbox"/> 1	<input type="checkbox"/> 2
Relay Address		

## 2.1.3.2 COMMUNICATION Menu (Courier)

Communication ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Relay Address		

## 2.1.3.3 COMMUNICATION Menu (IEC 60870-5-103)

Communication ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Baud Rate	<input type="checkbox"/> 300 bds	<input type="checkbox"/> 600 bds
	<input type="checkbox"/> 1.200 bds	<input type="checkbox"/> 2.400 bds
	<input type="checkbox"/> 4.800 bds	<input type="checkbox"/> 9.600 bds
	<input type="checkbox"/> 19.200 bds	<input type="checkbox"/> 38 400 bds
Relay Address		

## 2.1.3.4 COMMUNICATION Menu (DNP3)

Communication ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Baud Rate	<input type="checkbox"/> 300 bds	<input type="checkbox"/> 600 bds	
	<input type="checkbox"/> 1.200 bds	<input type="checkbox"/> 2.400 bds	
	<input type="checkbox"/> 4.800 bds	<input type="checkbox"/> 9.600 bds	
	<input type="checkbox"/> 19.200 bds	<input type="checkbox"/> 38 400 bds	
Parity	<input type="checkbox"/> Odd	<input type="checkbox"/> Even	<input type="checkbox"/> None
Data bits	<input type="checkbox"/> 7	<input type="checkbox"/> 8	
Stop bits	<input type="checkbox"/> 1	<input type="checkbox"/> 2	
Relay Address			

## 2.1.4 PROTECTION Menu

## 2.1.4.1 [50N/51N] E/Gnd

$I_e > ?$	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
$I_e >$	len		
Delay Type	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT	<input type="checkbox"/> RI

2.1.4.1.1 [51N]  $I_e >$  DMT

$tI_e >$	ms
----------	----

2.1.4.1.2 [51N]  $I_e >$  IDMT

Idmt	<input type="checkbox"/> IEC SI	<input type="checkbox"/> IEC STI
	<input type="checkbox"/> IEC VI	<input type="checkbox"/> IEC EI
	<input type="checkbox"/> IEC LTI	<input type="checkbox"/> CO2
	<input type="checkbox"/> IEEE MI	<input type="checkbox"/> CO8
	<input type="checkbox"/> IEEE VI	<input type="checkbox"/> IEEE EI
Tms		



2.1.4.1.3 [51N]  $I_e > Rl$ 

K	
---	--

2.1.4.2 [51N]  $I_e >>$ 

$I_e >>$	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_e >>$	len	
$tl_e >>$	ms	

2.1.4.3 [51N]  $I_e >>>$ 

$I_e >>> ?$	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_e >>>$	len	
$tl_e >>>$	ms	

## 2.1.5 AUTOMAT.CTRL Menu

## 2.1.5.1 Trip Command allocation

Trip $tl_e >$	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Trip $tl_e >>$	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Trip $tl_e >>>$	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.1.5.2 Latch Function allocation

Latch $tl_e >$	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Latch $tl_e >>$	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Latch $tl_e >>>$	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.1.5.3 Blocking logic allocation

Block $tl_e > =$	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block $tl_e >> =$	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block $tl_e >>> =$	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.1.5.4 Output Relays allocation (RL2 to RL4)

Functions	RL 2		RL 3		RL 4	
trip	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_e >$	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$tl_e >$	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_e >>$	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$tl_e >>$	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_e >>>$	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$tl_e >>>$	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.1.5.5 Inputs allocation

Input 1	<input type="checkbox"/> None	<input type="checkbox"/> Unlatch	<input type="checkbox"/> 52a
	<input type="checkbox"/> 52b	<input type="checkbox"/> CB FLT	<input type="checkbox"/> Aux 1
	<input type="checkbox"/> Aux2	<input type="checkbox"/> Blk log	
Input 2	<input type="checkbox"/> None	<input type="checkbox"/> Unlatch	<input type="checkbox"/> 52a
	<input type="checkbox"/> 52b	<input type="checkbox"/> CB FLT	<input type="checkbox"/> Aux 1
	<input type="checkbox"/> Aux2	<input type="checkbox"/> Blk log	

## 2.2 MiCOM P121 commissioning setting record sheets

## 2.2.1 OP PARAMETERS Menu

Password :

Reference :

Software version :

Frequency :

☐

50 Hz

☐

60 Hz

## 2.2.2 CONFIGURATION Menu

## 2.2.2.1 Display

Phase A Text	<input type="checkbox"/>	A	<input type="checkbox"/>	L1	<input type="checkbox"/>	R
Phase B Text	<input type="checkbox"/>	B	<input type="checkbox"/>	L2	<input type="checkbox"/>	S
Phase C Text	<input type="checkbox"/>	C	<input type="checkbox"/>	L3	<input type="checkbox"/>	T
E/Gnd Text	<input type="checkbox"/>	N	<input type="checkbox"/>	E	<input type="checkbox"/>	G

## 2.2.2.2 CT Ratio

Line CT Primary	Primary phase CT ratio		
Line CT Secondary	Secondary phase CT ratio		<input type="checkbox"/> 1 A <input type="checkbox"/> 5 A
E/Gnd CT Primary	Primary earth CT ratio		
E/Gnd CT Secondary	Secondary earth CT ratio		<input type="checkbox"/> 1 A <input type="checkbox"/> 5 A

## 2.2.2.3 LEDs 5 to 8 configuration

Functions	LED 5		LED 6		LED 7		LED 8	
I>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>E</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>E</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.2.3 COMMUNICATION Menu

## 2.2.3.1 COMMUNICATION Menu (MODBUS)

Communication ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Baud Rate	<input type="checkbox"/> 300 bds	<input type="checkbox"/> 600 bds
	<input type="checkbox"/> 1.200 bds	<input type="checkbox"/> 2.400 bds
	<input type="checkbox"/> 4.800 bds	<input type="checkbox"/> 9.600 bds
	<input type="checkbox"/> 19.200 bds	<input type="checkbox"/> 38 400 bds
Parity	<input type="checkbox"/> Odd	<input type="checkbox"/> Even
	<input type="checkbox"/> None	
Data bits	<input type="checkbox"/> 7	<input type="checkbox"/> 8
Stop bits	<input type="checkbox"/> 1	<input type="checkbox"/> 2
Relay Address		

## 2.2.3.2 COMMUNICATION Menu (Courier)

Communication ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Relay Address		

## 2.2.3.3 COMMUNICATION Menu (IEC 60870-5-103)

Communication ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Baud Rate	<input type="checkbox"/> 300 bds	<input type="checkbox"/> 600 bds
	<input type="checkbox"/> 1.200 bds	<input type="checkbox"/> 2.400 bds
	<input type="checkbox"/> 4.800 bds	<input type="checkbox"/> 9.600 bds
	<input type="checkbox"/> 19.200 bds	<input type="checkbox"/> 38 400 bds
Relay Address		

## 2.2.3.4 COMMUNICATION Menu (DNP3)

Communication ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Baud Rate	<input type="checkbox"/> 300 bds	<input type="checkbox"/> 600 bds
	<input type="checkbox"/> 1.200 bds	<input type="checkbox"/> 2.400 bds
	<input type="checkbox"/> 4.800 bds	<input type="checkbox"/> 9.600 bds
	<input type="checkbox"/> 19.200 bds	<input type="checkbox"/> 38 400 bds
Parity	<input type="checkbox"/> Odd	<input type="checkbox"/> Even
	<input type="checkbox"/> None	
Data bits	<input type="checkbox"/> 7	<input type="checkbox"/> 8
Stop bits	<input type="checkbox"/> 1	<input type="checkbox"/> 2
Relay Address		

## MiCOM P120/P121/P122/P123

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## 2.2.4 PROTECTION Menu

## 2.2.4.1 Phase Overcurrent [50/51]

## 2.2.4.1.1 [50/51] I&gt;

I>?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>	In	
Delay Type	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT <input type="checkbox"/> RI

## 2.2.4.1.1.1 [51] I&gt; DMT

tl>	ms
-----	----

## 2.2.4.1.1.2 [51] I&gt; IDMT

Idmt	<input type="checkbox"/> IEC SI	<input type="checkbox"/> IEC STI
	<input type="checkbox"/> IEC VI	<input type="checkbox"/> IEC EI
	<input type="checkbox"/> IEC LTI	<input type="checkbox"/> CO2
	<input type="checkbox"/> IEEE MI	<input type="checkbox"/> CO8
	<input type="checkbox"/> IEEE VI	<input type="checkbox"/> IEEE EI
Tms		

## 2.2.4.1.1.3 [51] I&gt; RI

K	
---	--

## 2.2.4.1.2 [51] I&gt;&gt;

I>>?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>	In	
tl>>	ms	

## 2.2.4.1.3 [51] I&gt;&gt;&gt;

I>>>?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>>	In	
tl>>>	ms	

## 2.2.4.2 Earth Overcurrent [50N/51N]

## 2.2.4.2.1 [50N/51N] E/Gnd

I <sub>e</sub> >?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >	I <sub>en</sub>	
Delay Type	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT <input type="checkbox"/> RI

2.2.4.2.1.1 [51N] I<sub>e</sub>> DMT

tl <sub>e</sub> >	ms
-------------------	----

2.2.4.2.1.2 [51N]  $I_e > IDMT$ 

Idmt	<input type="checkbox"/>	IEC SI	<input type="checkbox"/>	IEC STI
	<input type="checkbox"/>	IEC VI	<input type="checkbox"/>	IEC EI
	<input type="checkbox"/>	IEC LTI	<input type="checkbox"/>	CO2
	<input type="checkbox"/>	IEEE MI	<input type="checkbox"/>	CO8
	<input type="checkbox"/>	IEEE VI	<input type="checkbox"/>	IEEE EI
Tms				

2.2.4.2.1.3 [51N]  $I_e > RI$ 

K	
---	--

2.2.4.2.2 [51N]  $I_e >>$ 

$I_e >> ?$	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
$I_e >>$			len	
$tl_e >>$			ms	

2.2.4.2.3 [51N]  $I_e >>>$ 

$I_e >>> ?$	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
$I_e >>>$			len	
$tl_e >>>$			ms	

## 2.2.5 AUTOMAT.CTRL Menu

## 2.2.5.1 Trip Command allocation

Trip $tl >$	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip $tl >>$	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip $tl >>>$	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip $tl_e >$	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip $tl_e >>$	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip $tl_e >>>$	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO

## 2.2.5.2 Latch function allocation

Latch $tl >$	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch $tl >>$	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch $tl >>>$	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch $tl_e >$	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch $tl_e >>$	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch $tl_e >>>$	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO

## 2.2.5.3 Blocking Logic function allocation

Block tl>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block tl>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block tl>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block tl <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block tl <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block tl <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.2.5.4 OUTPUT RELAYS allocation (RL2 to RL4)

Functions	RL 2		RL 3		RL 4	
Trip	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.2.5.5 Inputs allocation

Input 1	<input type="checkbox"/> None	<input type="checkbox"/> Unlatch	<input type="checkbox"/> 52a
	<input type="checkbox"/> 52b	<input type="checkbox"/> CB FLT	<input type="checkbox"/> Aux 1
	<input type="checkbox"/> Aux2	<input type="checkbox"/> Blk log	
Input 2	<input type="checkbox"/> None	<input type="checkbox"/> Unlatch	<input type="checkbox"/> 52a
	<input type="checkbox"/> 52b	<input type="checkbox"/> CB FLT	<input type="checkbox"/> Aux 1
	<input type="checkbox"/> Aux2	<input type="checkbox"/> Blk log	

**2.3 MiCOM P122 commissioning setting record sheets****2.3.1 OP PARAMETERS Menu**

Password : \_\_\_\_\_

Reference : \_\_\_\_\_

Software version : \_\_\_\_\_

Frequency :

☐

50 Hz

☐

60 Hz

**2.3.2 CONFIGURATION Menu****2.3.2.1 Display**

Phase A Text	<input type="checkbox"/>	A	<input type="checkbox"/>	L1	<input type="checkbox"/>	R
Phase B Text	<input type="checkbox"/>	B	<input type="checkbox"/>	L2	<input type="checkbox"/>	S
Phase C Text	<input type="checkbox"/>	C	<input type="checkbox"/>	L3	<input type="checkbox"/>	T
E/Gnd Text	<input type="checkbox"/>	N	<input type="checkbox"/>	E	<input type="checkbox"/>	G

**2.3.2.2 CT Ratio**

Line CT Primary	Primary phase CT ratio		
Line CT Secondary	Secondary phase CT ratio	<input type="checkbox"/> 1 A	<input type="checkbox"/> 5 A
E/Gnd CT Primary	Primary earth CT ratio		
E/Gnd CT Secondary	Secondary earth CT ratio	<input type="checkbox"/> 1 A	<input type="checkbox"/> 5 A



## 2.3.2.3 LEDs 5 to 8 configuration

Functions	LED 5		LED 6		LED 7		LED 8	
I>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Thermal Trip	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Brkn. Cond	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Fail	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl2>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl2>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Input 1	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Input 2	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Input 3	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
t Aux1	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
t Aux2	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.3.2.4 Group select configuration

Change group input	<input type="checkbox"/> Edge	<input type="checkbox"/> Level
Setting group	<input type="checkbox"/> 1	<input type="checkbox"/> 2

## 2.3.2.5 Alarms configuration

Inst. Self Reset	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Reset Led on fault	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Alarm battery	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.3.2.6 Inputs configuration

<b>Inputs</b>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>
<b>Voltage input DC</b>	<input type="checkbox"/> DC	<input type="checkbox"/> AC	

## 2.3.2.7 Relays maintenance

<b>Maintenance Mode</b>	<input type="checkbox"/> YES	<input type="checkbox"/> NO					
<b>Relays CMD</b>	6 <input type="checkbox"/>	5 <input type="checkbox"/>	W <input type="checkbox"/>	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>

## 2.3.2.8 Phase rotation configuration

<b>Phase rotation</b>	<input type="checkbox"/> A-B-C	<input type="checkbox"/> A-C-B
-----------------------	--------------------------------	--------------------------------

## 2.3.3 COMMUNICATION Menu

## 2.3.3.1 COMMUNICATION Menu (MODBUS)

<b>Communication ?</b>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<b>Baud Rate</b>	<input type="checkbox"/> 300 bds	<input type="checkbox"/> 600 bds	
	<input type="checkbox"/> 1.200 bds	<input type="checkbox"/> 2.400 bds	
	<input type="checkbox"/> 4.800 bds	<input type="checkbox"/> 9.600 bds	
	<input type="checkbox"/> 19.200 bds	<input type="checkbox"/> 38 400 bds	
<b>Parity</b>	<input type="checkbox"/> Odd	<input type="checkbox"/> Even	<input type="checkbox"/> None
<b>Data bits</b>	<input type="checkbox"/> 7	<input type="checkbox"/> 8	
<b>Stop bits</b>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	
<b>Relay Address</b>			

## 2.3.3.2 COMMUNICATION Menu (Courier)

<b>Communication ?</b>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>Relay Address</b>		

## 2.3.3.3 COMMUNICATION Menu (IEC 60870-5-103)

<b>Communication ?</b>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>Baud Rate</b>	<input type="checkbox"/> 300 bds	<input type="checkbox"/> 600 bds
	<input type="checkbox"/> 1.200 bds	<input type="checkbox"/> 2.400 bds
	<input type="checkbox"/> 4.800 bds	<input type="checkbox"/> 9.600 bds
	<input type="checkbox"/> 19.200 bds	<input type="checkbox"/> 38 400 bds
<b>Relay Address</b>		

## 2.3.3.4 COMMUNICATION Menu (DNP3)

Communication ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Baud Rate	<input type="checkbox"/> 300 bds	<input type="checkbox"/> 600 bds
	<input type="checkbox"/> 1.200 bds	<input type="checkbox"/> 2.400 bds
	<input type="checkbox"/> 4.800 bds	<input type="checkbox"/> 9.600 bds
	<input type="checkbox"/> 19.200 bds	<input type="checkbox"/> 38 400 bds
Parity	<input type="checkbox"/> Odd	<input type="checkbox"/> Even
	<input type="checkbox"/> None	
Data bits	<input type="checkbox"/> 7	<input type="checkbox"/> 8
Stop bits	<input type="checkbox"/> 1	<input type="checkbox"/> 2
Relay Address		

## 2.3.4 PROTECTION G1 Menu

## 2.3.4.1 Phase Overcurrent [50/51]

## 2.3.4.1.1 [50/51] I&gt;

I> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>	In	
Delay Type	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT
	<input type="checkbox"/> RI	

## 2.3.4.1.1.1 [51] I&gt; DMT

tl>	ms
t Reset	ms

## 2.3.4.1.1.2 [51] I&gt; IDMT

Idmt	<input type="checkbox"/> IEC SI	<input type="checkbox"/> IEC STI
	<input type="checkbox"/> IEC VI	<input type="checkbox"/> IEC EI
	<input type="checkbox"/> IEC LTI	<input type="checkbox"/> CO2
	<input type="checkbox"/> IEEE MI	<input type="checkbox"/> CO8
	<input type="checkbox"/> IEEE VI	<input type="checkbox"/> IEEE EI
	<input type="checkbox"/> IEEE RC	
Tms		

## 2.3.4.1.1.3 [51] I&gt; DMT reset time

t Reset	ms
---------	----

## 2.3.4.1.1.4 [51] I&gt; IDMT reset time

Rtms	
------	--

## 2.3.4.1.1.5 [51] I&gt; RI

K	
t Reset	ms

## 2.3.4.1.2 [51] l&gt;&gt;

l>> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
l>>	In	
Delay Type	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT <input type="checkbox"/> RI

## 2.3.4.1.2.1 [51] l&gt;&gt; DMT

tl>>	ms
t Reset	ms

## 2.3.4.1.2.2 [51] l&gt;&gt; IDMT

Idmt	<input type="checkbox"/> IEC SI	<input type="checkbox"/> IEC STI
	<input type="checkbox"/> IEC VI	<input type="checkbox"/> IEC EI
	<input type="checkbox"/> IEC LTI	<input type="checkbox"/> CO2
	<input type="checkbox"/> IEEE MI	<input type="checkbox"/> CO8
	<input type="checkbox"/> IEEE VI	<input type="checkbox"/> IEEE EI
	<input type="checkbox"/> IEEE RC	
Tms		

## 2.3.4.1.2.3 [51] l&gt;&gt; DMT reset time

t Reset	ms
---------	----

## 2.3.4.1.2.4 [51] l&gt;&gt; IDMT reset time

Rtms	
------	--

## 2.3.4.1.2.5 [51] l&gt;&gt; RI

K	
t Reset	ms

## 2.3.4.1.3 [51] l&gt;&gt;&gt;

l>>>?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
l>>> Sample	<input type="checkbox"/> YES	<input type="checkbox"/> NO
l>>>	In	
tl>>>	ms	

## 2.3.4.2 Earth Overcurrent [50N/51N]

## 2.3.4.2.1 [50N/51N] E/Gnd

$I_e > ?$	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_e >$	len	
Delay Type	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT <input type="checkbox"/> RI <input type="checkbox"/> LABOR.

2.3.4.2.1.1 [51N]  $I_e >$  DMT

$tI_e >$	ms
t Reset	ms

2.3.4.2.1.2 [51N]  $I_e >$  IDMT

Idmt	<input type="checkbox"/> IEC SI	<input type="checkbox"/> IEC STI
	<input type="checkbox"/> IEC VI	<input type="checkbox"/> IEC EI
	<input type="checkbox"/> IEC LTI	<input type="checkbox"/> CO2
	<input type="checkbox"/> IEEE MI	<input type="checkbox"/> CO8
	<input type="checkbox"/> IEEE VI	<input type="checkbox"/> IEEE EI
	<input type="checkbox"/> IEEE RC	
Tms		

2.3.4.2.1.3 [51N]  $I_e >$  DMT reset time

t Reset	ms
---------	----

2.3.4.2.1.4 [51N]  $I_e >$  IDMT reset time

Rtms	
------	--

2.3.4.2.1.5 [51N]  $I_e >$  RI

K	
t Reset	ms

2.3.4.2.1.6 [51N]  $I_e >$  LABORELEC

Idmt	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
------	----------------------------	----------------------------	----------------------------

2.3.4.2.2 [51N]  $I_e >>$ 

$I_e >> ?$	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_e >>$	len	
Delay Type	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT <input type="checkbox"/> RI <input type="checkbox"/> LABOR.

2.3.4.2.2.1 [51N]  $I_e >>$  DMT

$tI_e >>$	ms
t Reset	ms

2.3.4.2.2.2 [51N]  $I_{e>>}$  IDMT

Idmt	<input type="checkbox"/>	IEC SI	<input type="checkbox"/>	IEC STI
	<input type="checkbox"/>	IEC VI	<input type="checkbox"/>	IEC EI
	<input type="checkbox"/>	IEC LTI	<input type="checkbox"/>	CO2
	<input type="checkbox"/>	IEEE MI	<input type="checkbox"/>	CO8
	<input type="checkbox"/>	IEEE VI	<input type="checkbox"/>	IEEE EI
	<input type="checkbox"/>	IEEE RC		
Tms				

2.3.4.2.2.3 [51N]  $I_{e>>}$  DMT reset time

t Reset	ms
---------	----

2.3.4.2.2.4 [51N]  $I_{e>>}$  IDMT reset time

Rtms	
------	--

2.3.4.2.2.5 [51N]  $I_{e>>}$  RI

K	
t Reset	ms

2.3.4.2.2.6 [51N]  $I_{e>>}$  LABORELEC

Idmt	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
------	----------------------------	----------------------------	----------------------------

2.3.4.2.3 [51N]  $I_{e>>>}$ 

$I_{e>>>}$ ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_{e>>>}$ Sample	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_{e>>>}$	len	
$tl_{e>>>}$	ms	

## 2.3.4.3 [49] THERMAL OVERLOAD

Therm OL ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_{0>}$	In	
Te	mn	
k		
$\theta$ Trip	%	
$\theta$ Alarm ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$\theta$ Alarm	%	

2.3.4.4 [37] UNDERCURRENT  $I_{<}$ 

$I_{<}$ ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_{<}$	%	
$tl_{<}$	ms	

## 2.3.4.5 [46] Negative phase sequence overcurrent I2&gt;

I2> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I2>	In	
Delay Type	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT <input type="checkbox"/> RI

## 2.3.4.5.1 [46] I2&gt; DMT

tl>	ms
-----	----

## 2.3.4.5.2 [46] I2&gt; DMT

Idmt	<input type="checkbox"/> IEC SI	<input type="checkbox"/> IEC STI
	<input type="checkbox"/> IEC VI	<input type="checkbox"/> IEC EI
	<input type="checkbox"/> IEC LTI	<input type="checkbox"/> CO2
	<input type="checkbox"/> IEEE MI	<input type="checkbox"/> CO8
	<input type="checkbox"/> IEEE VI	<input type="checkbox"/> IEEE EI
Tms		

## 2.3.4.5.3 [46] I2&gt; DMT reset time

t Reset	ms
---------	----

## 2.3.4.5.4 [46] I2&gt; IDMT reset time

Rtms	
------	--

## 2.3.4.5.5 [46] I2&gt; RI

K	
t Reset	ms

## 2.3.4.6 [46] Negative phase sequence overcurrent I2&gt;&gt;

I2>> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I2>>	In	
tl2>>	ms	

## 2.3.5 PROTECTION G2 Menu

## 2.3.5.1 Phase Overcurrent [50/51]

## 2.3.5.1.1 [50/51] I&gt;

I> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>	In	
Delay Type	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT <input type="checkbox"/> RI

## 2.3.5.1.1.1 [51] I&gt; DMT

tl>	ms
t Reset	ms

## 2.3.5.1.1.2 [51] I&gt; IDMT

Idmt	<input type="checkbox"/> IEC SI	<input type="checkbox"/> IEC STI
	<input type="checkbox"/> IEC VI	<input type="checkbox"/> IEC EI
	<input type="checkbox"/> IEC LTI	<input type="checkbox"/> CO2
	<input type="checkbox"/> IEEE MI	<input type="checkbox"/> CO8
	<input type="checkbox"/> IEEE VI	<input type="checkbox"/> IEEE EI
	<input type="checkbox"/> IEEE RC	
Tms		

## 2.3.5.1.1.3 [51] I&gt; DMT reset time

t Reset	ms
---------	----

## 2.3.5.1.1.4 [51] I&gt; IDMT reset time

Rtms	
------	--

## 2.3.5.1.1.5 [51] I&gt; RI

K	
t Reset	ms

## 2.3.5.1.2 [51] I&gt;&gt;

I>> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>	In	
Delay Type	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT <input type="checkbox"/> RI

## 2.3.5.1.2.1 [51] I&gt;&gt; DMT

tl>>	ms
t Reset	ms



## 2.3.5.1.2.2 [51] I&gt;&gt; IDMT

<b>Idmt</b>	<input type="checkbox"/>	IEC SI	<input type="checkbox"/>	IEC STI
	<input type="checkbox"/>	IEC VI	<input type="checkbox"/>	IEC EI
	<input type="checkbox"/>	IEC LTI	<input type="checkbox"/>	CO2
	<input type="checkbox"/>	IEEE MI	<input type="checkbox"/>	CO8
	<input type="checkbox"/>	IEEE VI	<input type="checkbox"/>	IEEE EI
	<input type="checkbox"/>	IEEE RC		
<b>Tms</b>				

## 2.3.5.1.2.3 [51] I&gt;&gt; DMT reset time

<b>t Reset</b>	ms
----------------	----

## 2.3.5.1.2.4 [51] I&gt;&gt; IDMT reset time

<b>Rtms</b>	
-------------	--

## 2.3.5.1.2.5 [51] I&gt;&gt; RI

<b>K</b>	
<b>t Reset</b>	ms

## 2.3.5.1.3 [51] I&gt;&gt;&gt;

<b>I&gt;&gt;&gt;?</b>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
<b>I&gt;&gt;&gt; Sample</b>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
<b>I&gt;&gt;&gt;</b>	In			
<b>tl&gt;&gt;&gt;</b>	ms			

## 2.3.5.2 Earth Overcurrent [50N/51N]

## 2.3.5.2.1 [50N/51N] E/Gnd

<b>I<sub>e</sub>&gt;?</b>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO				
<b>I<sub>e</sub>&gt;</b>	Ien							
<b>Delay Type</b>	<input type="checkbox"/>	IDMT	<input type="checkbox"/>	DMT	<input type="checkbox"/>	RI	<input type="checkbox"/>	LABOR.

2.3.5.2.1.1 [51N] I<sub>e</sub>> DMT

<b>tl<sub>e</sub>&gt;</b>	ms
<b>t Reset</b>	ms

2.3.5.2.1.2 [51N]  $I_o > \text{IDMT}$ 

<b>Idmt</b>	<input type="checkbox"/> IEC SI	<input type="checkbox"/> IEC STI
	<input type="checkbox"/> IEC VI	<input type="checkbox"/> IEC EI
	<input type="checkbox"/> IEC LTI	<input type="checkbox"/> CO2
	<input type="checkbox"/> IEEE MI	<input type="checkbox"/> CO8
	<input type="checkbox"/> IEEE VI	<input type="checkbox"/> IEEE EI
	<input type="checkbox"/> IEEE RC	
<b>Tms</b>		

2.3.5.2.1.3 [51N]  $I_o >$  DMT reset time

<b>t Reset</b>	ms
----------------	----

2.3.5.2.1.4 [51N]  $I_o >$  IDMT reset time

<b>Rtms</b>	
-------------	--

2.3.5.2.1.5 [51N]  $I_o >$  RI

<b>K</b>	
<b>t Reset</b>	ms

2.3.5.2.1.6 [51N]  $I_o >$  LABORELEC

<b>Idmt</b>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
-------------	----------------------------	----------------------------	----------------------------

2.3.5.2.2 [51N]  $I_o >>$ 

<b><math>I_o &gt;&gt; ?</math></b>	<input type="checkbox"/> YES	<input type="checkbox"/> NO		
<b><math>I_o &gt;&gt;</math></b>	len			
<b>Delay Type</b>	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT	<input type="checkbox"/> RI	<input type="checkbox"/> LABOR.

2.3.5.2.2.1 [51N]  $I_o >>$  DMT

<b><math>t I_o &gt;&gt;</math></b>	ms
<b>t Reset</b>	ms

2.3.5.2.2.2 [51N]  $I_o >>$  IDMT

<b>Idmt</b>	<input type="checkbox"/> IEC SI	<input type="checkbox"/> IEC STI
	<input type="checkbox"/> IEC VI	<input type="checkbox"/> IEC EI
	<input type="checkbox"/> IEC LTI	<input type="checkbox"/> CO2
	<input type="checkbox"/> IEEE MI	<input type="checkbox"/> CO8
	<input type="checkbox"/> IEEE VI	<input type="checkbox"/> IEEE EI
	<input type="checkbox"/> IEEE RC	
<b>Tms</b>		

2.3.5.2.2.3 [51N]  $I_o >>$  DMT reset time

<b>t Reset</b>	ms
----------------	----

2.3.5.2.2.4 [51N]  $I_{e>>}$  IDMT reset time

Rtms	
------	--

2.3.5.2.2.5 [51N]  $I_{e>>}$  RI

K	
t Reset	ms

2.3.5.2.2.6 [51N]  $I_{e>>}$  LABORELEC

Idmt	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
------	----------------------------	----------------------------	----------------------------

2.3.5.2.3 [51N]  $I_{e>>>}$ 

$I_{e>>>}$ ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_{e>>>}$ Sample	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_{e>>>}$	len	
t $I_{e>>>}$	ms	

## 2.3.5.3 [49] THERMAL OVERLOAD

Therm OL ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_{\theta>}$	In	
Te	mn	
k		
$\theta$ Trip	%	
$\theta$ Alarm ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$\theta$ Alarm	%	

2.3.5.4 [37] UNDERCURRENT  $I_{<}$ 

$I_{<}$ ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_{<}$	%	
t $I_{<}$	ms	

2.3.5.5 [46] Negative phase sequence overcurrent  $I_{2>}$ 

I2> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
I2>	In		
Delay Type	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT	<input type="checkbox"/> RI

2.3.5.5.1 [46]  $I_{2>}$  DMT

t $I_{2>}$	ms
------------	----

## 2.3.5.5.2 [46] I2&gt; DMT

Idmt	<input type="checkbox"/>	IEC SI	<input type="checkbox"/>	IEC STI
	<input type="checkbox"/>	IEC VI	<input type="checkbox"/>	IEC EI
	<input type="checkbox"/>	IEC LTI	<input type="checkbox"/>	CO2
	<input type="checkbox"/>	IEEE MI	<input type="checkbox"/>	CO8
	<input type="checkbox"/>	IEEE VI	<input type="checkbox"/>	IEEE EI
Tms				

## 2.3.5.5.3 [46] I2&gt; DMT reset time

t Reset	ms
---------	----

## 2.3.5.5.4 [46] I2&gt; IDMT reset time

Rtms	
------	--

## 2.3.5.5.5 [46] I2&gt; RI

K	
t Reset	ms

## 2.3.5.6 [46] Negative phase sequence overcurrent I2&gt;&gt;

I2>> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I2>>	In	
tl2>>	ms	

## 2.3.6 AUTOMAT. CTRL Menu

## 2.3.6.1 TRIP Command allocation

Trip tl>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Trip tl>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Trip tl>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Trip tl <sub>0</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Trip tl <sub>0</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Trip tl <sub>0</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Trip tl<	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Trip tl2>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Trip tl2>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Trip Thermal θ	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Trip Brkn. Cond	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Trip tAux1	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Trip tAux2	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Trip tAux3	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.3.6.2 Latch function allocation

Latch tl>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tl>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tl>>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tl <sub>e</sub> >	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tl <sub>e</sub> >>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tl <sub>e</sub> >>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tl<	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tl2>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tl2>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch Thermal θ	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch Brkn .Cond	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tAux1	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tAux2	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tAux3	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO

## 2.3.6.3 Blocking Logic 1 function allocation

Block 1 tl>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tl>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tl>>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tl <sub>e</sub> >	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tl <sub>e</sub> >>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tl <sub>e</sub> >>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tl<	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tl2>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tl2>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 Thermal θ	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 Brkn .Cond	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tAux1	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tAux2	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tAux3	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO

## 2.3.6.4 Blocking Logic 2 function allocation

Block 2 tl>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tl>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tl>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tl <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tl <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tl <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tl<	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tl2>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tl2>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 Thermal 0	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 Brkn .Cond	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tAux1	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tAux2	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tAux3	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.3.6.5 SELECTIVE SCHEME LOGIC1 function allocation

Logic Select 1	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Sel1 tl>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Sel1 tl>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Sel1 tl <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Sel1 tl <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
t Sel1	ms	

## 2.3.6.6 SELECTIVE SCHEME LOGIC2 function allocation

Logic Select 2	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Sel2 tl>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Sel2 tl>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Sel2 tl <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Sel2 tl <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
t Sel2	ms	

## 2.3.6.7 OUTPUT RELAYS allocation

## 2.3.6.7.1 OUTPUT RELAYS allocation (RL2 to RL4)

Functions	RL 2		RL 3		RL 4	
Trip	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl<	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl2>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl2>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Therm Alarm	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Therm Trip	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Alarm	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
52 Fail	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Brkn cond	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Fail	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Close	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tAux1	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tAux2	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tAux3	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Order COM 1	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Order COM 2	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Order COM 3	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Order COM 4	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Active Group	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.3.6.7.2 OUTPUT RELAYS allocation (RL5 to RL8)

Functions	RL 5		RL 6	
Trip	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl<	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl2>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl2>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Therm Alarm	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Therm Trip	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Alarm	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
52 Fail	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Brkn cond	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Fail	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Close	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tAux1	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tAux2	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tAux3	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Order COM 1	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Order COM 2	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Order COM 3	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Order COM 4	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Active Group	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO



## 2.3.6.8 LOGIC INPUT allocation

## 2.3.6.8.1 Inputs

Input 1	<input type="checkbox"/> None	<input type="checkbox"/> Unlatch	<input type="checkbox"/> 52a
	<input type="checkbox"/> 52b	<input type="checkbox"/> CB FLT	<input type="checkbox"/> Aux1
	<input type="checkbox"/> Aux2	<input type="checkbox"/> Blk Log 1	<input type="checkbox"/> Blk Log 2
	<input type="checkbox"/> Strt Dist	<input type="checkbox"/> Cold L PU	<input type="checkbox"/> Log Sel 1
	<input type="checkbox"/> Log Sel 2	<input type="checkbox"/> Change Set	<input type="checkbox"/> 0 Reset
	<input type="checkbox"/> Trip Circ.	<input type="checkbox"/> Rst Led	<input type="checkbox"/> Maint. M.
	<input type="checkbox"/> Aux3	<input type="checkbox"/> Strt tBF	<input type="checkbox"/>
Input 2	<input type="checkbox"/> None	<input type="checkbox"/> Unlatch	<input type="checkbox"/> 52a
	<input type="checkbox"/> 52b	<input type="checkbox"/> CB FLT	<input type="checkbox"/> Aux1
	<input type="checkbox"/> Aux2	<input type="checkbox"/> Blk Log 1	<input type="checkbox"/> Blk Log 2
	<input type="checkbox"/> Strt Dist	<input type="checkbox"/> Cold L PU	<input type="checkbox"/> Log Sel 1
	<input type="checkbox"/> Log Sel 2	<input type="checkbox"/> Change Set	<input type="checkbox"/> 0 Reset
	<input type="checkbox"/> Trip Circ.	<input type="checkbox"/> Rst Led	<input type="checkbox"/> Maint. M.
	<input type="checkbox"/> Aux3	<input type="checkbox"/> Strt tBF	<input type="checkbox"/>
Input 3	<input type="checkbox"/> None	<input type="checkbox"/> Unlatch	<input type="checkbox"/> 52a
	<input type="checkbox"/> 52b	<input type="checkbox"/> CB FLT	<input type="checkbox"/> Aux1
	<input type="checkbox"/> Aux2	<input type="checkbox"/> Blk Log 1	<input type="checkbox"/> Blk Log 2
	<input type="checkbox"/> Strt Dist	<input type="checkbox"/> Cold L PU	<input type="checkbox"/> Log Sel 1
	<input type="checkbox"/> Log Sel 2	<input type="checkbox"/> Change Set	<input type="checkbox"/> 0 Reset
	<input type="checkbox"/> Trip Circ.	<input type="checkbox"/> Rst Led	<input type="checkbox"/> Maint. M.
	<input type="checkbox"/> Aux3	<input type="checkbox"/> Strt tBF	<input type="checkbox"/>

## 2.3.6.8.2 t Aux

Aux 1 time : t Aux 1	ms
Aux 2 time : t Aux 2	ms
Aux 3 time : t Aux 3	ms

## 2.3.6.9 BROKEN CONDUCTOR

Brkn. Cond ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tBC	ms	
Ratio I2/I1	%	

## 2.3.6.10 Cold Load Pick-up

Cold Load PU ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>>> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> > ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >>> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl2> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl2>> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
t Therm ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Level	%	
tCL	ms	

## 2.3.6.11 CIRCUIT BREAKER FAILURE

CB Fail ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I<	In	
tBF	ms	
Block I> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block I <sub>e</sub> > ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.3.6.12 CIRCUIT BREAKER SUPERVISION

TC Supervision ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
t SUP	s	
CB Open S'vision	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Open Time	ms	
CB Close S'vision	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Close Time	ms	
CB Open Alarm ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Open NB		
Σ Amps (n) ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Σ Amps (n)		
n		
t Open Pulse	ms	
t Close Pulse	ms	

## 2.3.7 RECORDS Menu

## 2.3.7.1 DISTURBANCE RECORD

Pre-Time	ms	
Post-Time	ms	
Disturb Rec Trig	<input type="checkbox"/> ON INST.	<input type="checkbox"/> ON TRIP

## 2.3.7.2 TIME PEAK VALUE

Time Window	mn
-------------	----

## 2.3.7.3 ROLLING DEMAND

Sub Period	mn
Num of Sub Per.	

**2.4 MiCOM P123 commissioning setting record sheets****2.4.1 OP PARAMETERS Menu**

Password : \_\_\_\_\_

Reference : \_\_\_\_\_

Software version : \_\_\_\_\_

Frequency :

☐

50 Hz

☐

60 Hz

**2.4.2 CONFIGURATION Menu****2.4.2.1 Display**

Phase A Text	<input type="checkbox"/>	A	<input type="checkbox"/>	L1	<input type="checkbox"/>	R
Phase B Text	<input type="checkbox"/>	B	<input type="checkbox"/>	L2	<input type="checkbox"/>	S
Phase C Text	<input type="checkbox"/>	C	<input type="checkbox"/>	L3	<input type="checkbox"/>	T
E/Gnd Text	<input type="checkbox"/>	N	<input type="checkbox"/>	E	<input type="checkbox"/>	G

**2.4.2.2 CT Ratio**

Line CT Primary	Primary phase CT ratio		
Line CT Secondary	Secondary phase CT ratio	<input type="checkbox"/> 1 A	<input type="checkbox"/> 5 A
E/Gnd CT Primary	Primary earth CT ratio		
E/Gnd CT Secondary	Secondary earth CT ratio	<input type="checkbox"/> 1 A	<input type="checkbox"/> 5 A

## 2.4.2.3 LEDs 5 to 8 configuration

Functions	LED 5		LED 6		LED 7		LED 8	
I>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Therm Trip	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Brkn. Cond	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Fail	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl2>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl2>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Input 1	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Input 2	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Input 3	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Input 4	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Input 5	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Recloser Run	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Recloser Blocked	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
T Aux 1	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
T Aux 2	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CONF SOTF	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.4.2.4 Group select configuration

Change group input	<input type="checkbox"/> Edge	<input type="checkbox"/> Level
Setting group	<input type="checkbox"/> 1	<input type="checkbox"/> 2

## 2.4.2.5 Alarms configuration

Inst. Self Reset	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Reset Led on fault	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Alarm battery	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.4.2.6 Inputs configuration

Inputs	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>
Voltage input DC	<input type="checkbox"/> DC	<input type="checkbox"/> AC	

## 2.4.2.7 Relays maintenance

Maintenance Mode	<input type="checkbox"/> YES					<input type="checkbox"/> NO				
Relays CMD	8	7	6	5	W	4	3	2	1	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## 2.4.2.8 Phase rotation configuration

Phase rotation	<input type="checkbox"/> A-B-C	<input type="checkbox"/> A-C-B
----------------	--------------------------------	--------------------------------

## 2.4.3 COMMUNICATION Menu

## 2.4.3.1 COMMUNICATION Menu (MODBUS)

Communication ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Baud Rate	<input type="checkbox"/> 300 bds	<input type="checkbox"/> 600 bds	
	<input type="checkbox"/> 1.200 bds	<input type="checkbox"/> 2.400 bds	
	<input type="checkbox"/> 4.800 bds	<input type="checkbox"/> 9.600 bds	
	<input type="checkbox"/> 19.200 bds	<input type="checkbox"/> 38 400 bds	
Parity	<input type="checkbox"/> Odd	<input type="checkbox"/> Even	<input type="checkbox"/> None
Data bits	<input type="checkbox"/> 7	<input type="checkbox"/> 8	
Stop bits	<input type="checkbox"/> 1	<input type="checkbox"/> 2	
Relay Address			

## 2.4.3.2 COMMUNICATION Menu (Courier)

Communication ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Relay Address		

## 2.4.3.3 COMMUNICATION Menu (IEC 60870-5-103)

Communication ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Baud Rate	<input type="checkbox"/> 300 bds	<input type="checkbox"/> 600 bds
	<input type="checkbox"/> 1.200 bds	<input type="checkbox"/> 2.400 bds
	<input type="checkbox"/> 4.800 bds	<input type="checkbox"/> 9.600 bds
	<input type="checkbox"/> 19.200 bds	<input type="checkbox"/> 38 400 bds
Relay Address		

## 2.4.3.4 COMMUNICATION Menu (DNP3)

Communication ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Baud Rate	<input type="checkbox"/> 300 bds	<input type="checkbox"/> 600 bds	
	<input type="checkbox"/> 1.200 bds	<input type="checkbox"/> 2.400 bds	
	<input type="checkbox"/> 4.800 bds	<input type="checkbox"/> 9.600 bds	
	<input type="checkbox"/> 19.200 bds	<input type="checkbox"/> 38 400 bds	
Parity	<input type="checkbox"/> Odd	<input type="checkbox"/> Even	<input type="checkbox"/> None
Data bits	<input type="checkbox"/> 7	<input type="checkbox"/> 8	
Stop bits	<input type="checkbox"/> 1	<input type="checkbox"/> 2	
Relay Address			

## 2.4.4 PROTECTION G1 Menu

## 2.4.4.1 Phase Overcurrent [50/51]

## 2.4.4.1.1 [50/51] I&gt;

I> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
I>	In		
Delay Type	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT	<input type="checkbox"/> RI

## 2.4.4.1.1.1 [51] I&gt; DMT

tl>	ms
t Reset	ms

## 2.4.4.1.1.2 [51] I&gt; IDMT

Idmt	<input type="checkbox"/> IEC SI	<input type="checkbox"/> IEC STI
	<input type="checkbox"/> IEC VI	<input type="checkbox"/> IEC EI
	<input type="checkbox"/> IEC LTI	<input type="checkbox"/> CO2
	<input type="checkbox"/> IEEE MI	<input type="checkbox"/> CO8
	<input type="checkbox"/> IEEE VI	<input type="checkbox"/> IEEE EI
	<input type="checkbox"/> IEEE RC	
Tms		

## 2.4.4.1.1.3 [51] l&gt; DMT reset time

<b>t Reset</b>	ms
----------------	----

## 2.4.4.1.1.4 [51] l&gt; IDMT reset time

<b>Rtms</b>	
-------------	--

## 2.4.4.1.1.5 [51] l&gt; RI

<b>K</b>	
<b>t Reset</b>	ms

## 2.4.4.1.2 [51] l&gt;&gt;

<b>l&gt;&gt; ?</b>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>l&gt;&gt;</b>	In	
<b>Delay Type</b>	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT <input type="checkbox"/> RI

## 2.4.4.1.2.1 [51] l&gt;&gt; DMT

<b>tl&gt;&gt;</b>	ms
<b>t Reset</b>	ms

## 2.4.4.1.2.2 [51] l&gt;&gt; IDMT

<b>Idmt</b>	<input type="checkbox"/> IEC SI	<input type="checkbox"/> IEC STI
	<input type="checkbox"/> IEC VI	<input type="checkbox"/> IEC EI
	<input type="checkbox"/> IEC LTI	<input type="checkbox"/> CO2
	<input type="checkbox"/> IEEE MI	<input type="checkbox"/> CO8
	<input type="checkbox"/> IEEE VI	<input type="checkbox"/> IEEE EI
	<input type="checkbox"/> IEEE RC	
<b>Tms</b>		

## 2.4.4.1.2.3 [51] l&gt;&gt; DMT reset time

<b>t Reset</b>	ms
----------------	----

## 2.4.4.1.2.4 [51] l&gt;&gt; IDMT reset time

<b>Rtms</b>	
-------------	--

## 2.4.4.1.2.5 [51] l&gt;&gt; RI

<b>K</b>	
<b>t Reset</b>	ms

## 2.4.4.1.3 [51] l&gt;&gt;&gt;

<b>l&gt;&gt;&gt;?</b>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>l&gt;&gt;&gt; Sample</b>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>l&gt;&gt;&gt;</b>	In	
<b>tl&gt;&gt;&gt;</b>	ms	



## 2.4.4.2 Earth Overcurrent [50N/51N]

## 2.4.4.2.1 [50N/51N] E/Gnd

$I_e > ?$	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_e >$	len	
Delay Type	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT <input type="checkbox"/> RI <input type="checkbox"/> LABOR.

2.4.4.2.1.1 [51N]  $I_e >$  DMT

$t_{I_e >}$	ms
t Reset	ms

2.4.4.2.1.2 [51N]  $I_e >$  IDMT

Idmt	<input type="checkbox"/> IEC SI	<input type="checkbox"/> IEC STI
	<input type="checkbox"/> IEC VI	<input type="checkbox"/> IEC EI
	<input type="checkbox"/> IEC LTI	<input type="checkbox"/> CO2
	<input type="checkbox"/> IEEE MI	<input type="checkbox"/> CO8
	<input type="checkbox"/> IEEE VI	<input type="checkbox"/> IEEE EI
Tms		

2.4.4.2.1.3 [51N]  $I_e >$  DMT reset time

t Reset	ms
---------	----

2.4.4.2.1.4 [51N]  $I_e >$  IDMT reset time

Rtms	
------	--

2.4.4.2.1.5 [51N]  $I_e >$  RI

K	
t Reset	ms

2.4.4.2.1.6 [51N]  $I_e >$  LABORELEC

Idmt	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
------	----------------------------	----------------------------	----------------------------

2.4.4.2.2 [51N]  $I_e >>$ 

$I_e >> ?$	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_e >>$	len	
Delay Type	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT <input type="checkbox"/> RI <input type="checkbox"/> LABOR.

2.4.4.2.2.1 [51N]  $I_e >>$  DMT

$t_{I_e >>}$	ms
t Reset	ms

2.4.4.2.2.2 [51N]  $I_{\phi} >>$  IDMT

Idmt	<input type="checkbox"/>	IEC SI	<input type="checkbox"/>	IEC STI
	<input type="checkbox"/>	IEC VI	<input type="checkbox"/>	IEC EI
	<input type="checkbox"/>	IEC LTI	<input type="checkbox"/>	CO2
	<input type="checkbox"/>	IEEE MI	<input type="checkbox"/>	CO8
	<input type="checkbox"/>	IEEE VI	<input type="checkbox"/>	IEEE EI
Tms				

2.4.4.2.2.3 [51N]  $I_{\phi} >>$  DMT reset time

t Reset	ms
---------	----

2.4.4.2.2.4 [51N]  $I_{\phi} >>$  IDMT reset time

Rtms	
------	--

2.4.4.2.2.5 [51N]  $I_{\phi} >>$  RI

K	
t Reset	ms

2.4.4.2.2.6 [51N]  $I_{\phi} >>$  LABORELEC

Idmt	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
------	----------------------------	----------------------------	----------------------------

2.4.4.2.3 [51N]  $I_{\phi} >>>$ 

$I_{\phi} >>> ?$	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_{\phi} >>>$ Sample	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_{\phi} >>>$	len	
$tl_{\phi} >>>$	ms	

## 2.4.4.3 [49] THERMAL OVERLOAD

[49] Therm OL ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_{\theta} >$	In	
Te	mn	
k		
$\theta$ Trip	%	
[49] $\theta$ Alarm ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$\theta$ Alarm	%	

2.4.4.4 [37] UNDERCURRENT  $I_{<}$ 

$I_{<} ?$	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_{<}$	%	
$tl_{<}$	ms	

## 2.4.4.5 [46] Negative phase sequence overcurrent I2&gt;

I2>?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I2>	In	
Delay Trip	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT <input type="checkbox"/> RI

## 2.4.4.5.1 [46] I2&gt; DMT

tl2>	ms
------	----

## 2.4.4.5.2 [46] I2&gt; IDMT

Idmt	<input type="checkbox"/> IEC SI	<input type="checkbox"/> IEC STI
	<input type="checkbox"/> IEC VI	<input type="checkbox"/> IEC EI
	<input type="checkbox"/> IEC LTI	<input type="checkbox"/> CO2
	<input type="checkbox"/> IEEE MI	<input type="checkbox"/> CO8
	<input type="checkbox"/> IEEE VI	<input type="checkbox"/> IEEE EI
Tms		

## 2.4.4.5.3 [46] I2&gt; DMT reset time

t Reset	ms
---------	----

## 2.4.4.5.4 [46] I2&gt; IDMT reset time

Rtms	
------	--

## 2.4.4.5.5 [46] I2&gt; RI

K	
t Reset	ms

## 2.4.4.6 [46] Negative phase sequence overcurrent I2&gt;&gt;

I2>>?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I2>>	In	
tl2>>	ms	

## 2.4.4.7 [79] AUTORECLOSER

[79] Autoreclose ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Ext CB Fail ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Ext CB Fail Time	ms		
Ext Block ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Aux 1 ( $I_{>}$ )	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Aux 2 ( $I_{>}$ )	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Dead Time tD1	ms		
Dead Time tD2	ms		
Dead Time tD3	ms		
Dead Time tD4	ms		
Reclaim Time tR	ms		
Inhib Time tI	ms		
Phase Cycles			
E/Gnd Cycles			
CYCLES tI>	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>
CYCLES tI>>	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>
CYCLES tI>>>	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>
CYCLES tI <sub>e</sub> >	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>
CYCLES tI <sub>e</sub> >>	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>
CYCLES tI <sub>e</sub> >>>	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>
CYCLES tAux 1	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>
CYCLES tAux 2	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>

## 2.4.5 PROTECTION G2 Menu

## 2.4.5.1 Phase Overcurrent [50/51]

## 2.4.5.1.1 [50/51] I&gt;

I> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>	In	
Delay Type	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT <input type="checkbox"/> RI

## 2.4.5.1.1.1 [51] I&gt; DMT

tl>	ms
t Reset	ms

## 2.4.5.1.1.2 [51] I&gt; IDMT

Idmt	<input type="checkbox"/> IEC SI	<input type="checkbox"/> IEC STI
	<input type="checkbox"/> IEC VI	<input type="checkbox"/> IEC EI
	<input type="checkbox"/> IEC LTI	<input type="checkbox"/> CO2
	<input type="checkbox"/> IEEE MI	<input type="checkbox"/> CO8
	<input type="checkbox"/> IEEE VI	<input type="checkbox"/> IEEE EI
	<input type="checkbox"/> IEEE RC	
Tms		

## 2.4.5.1.1.3 [51] I&gt; DMT reset time

t Reset	ms
---------	----

## 2.4.5.1.1.4 [51] I&gt; IDMT reset time

Rtms	
------	--

## 2.4.5.1.1.5 [51] I&gt; RI

K	
t Reset	ms

## 2.4.5.1.2 [51] I&gt;&gt;

I>> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>	In	
Delay Type	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT <input type="checkbox"/> RI

## 2.4.5.1.2.1 [51] I&gt;&gt; DMT

tl>>	ms
t Reset	ms

## 2.4.5.1.2.2 [51] l&gt;&gt; IDMT

Idmt	<input type="checkbox"/>	IEC SI	<input type="checkbox"/>	IEC STI
	<input type="checkbox"/>	IEC VI	<input type="checkbox"/>	IEC EI
	<input type="checkbox"/>	IEC LTI	<input type="checkbox"/>	CO2
	<input type="checkbox"/>	IEEE MI	<input type="checkbox"/>	CO8
	<input type="checkbox"/>	IEEE VI	<input type="checkbox"/>	IEEE EI
	<input type="checkbox"/>	IEEE RC		
Tms				

## 2.4.5.1.2.3 [51] l&gt;&gt; DMT reset time

t Reset	ms
---------	----

## 2.4.5.1.2.4 [51] l&gt;&gt; IDMT reset time

Rtms	
------	--

## 2.4.5.1.2.5 [51] l&gt;&gt; RI

K	
t Reset	ms

## 2.4.5.1.3 [51] l&gt;&gt;&gt;

l>>>?	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
l>>> Sample	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
l>>>	In			
tl>>>	ms			

## 2.4.5.2 Earth Overcurrent [50N/51N]

## 2.4.5.2.1 [50N/51N] E/Gnd

$I_e > ?$	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO				
$I_e >$	Ien							
Delay Type	<input type="checkbox"/>	IDMT	<input type="checkbox"/>	DMT	<input type="checkbox"/>	RI	<input type="checkbox"/>	LABOR.

2.4.5.2.1.1 [51N]  $I_e >$  DMT

$tl_e >$	ms
t Reset	ms

2.4.5.2.1.2 [51N]  $I_e > \text{IDMT}$ 

Idmt	<input type="checkbox"/>	IEC SI	<input type="checkbox"/>	IEC STI
	<input type="checkbox"/>	IEC VI	<input type="checkbox"/>	IEC EI
	<input type="checkbox"/>	IEC LTI	<input type="checkbox"/>	CO2
	<input type="checkbox"/>	IEEE MI	<input type="checkbox"/>	CO8
	<input type="checkbox"/>	IEEE VI	<input type="checkbox"/>	IEEE EI
	<input type="checkbox"/>	IEEE RC		
Tms				

2.4.5.2.1.3 [51N]  $I_e > \text{DMT}$  reset time

t Reset	ms
---------	----

2.4.5.2.1.4 [51N]  $I_e > \text{IDMT}$  reset time

Rtms	
------	--

2.4.5.2.1.5 [51N]  $I_e > \text{RI}$ 

K	
t Reset	ms

2.4.5.2.1.6 [51N]  $I_e > \text{LABORELEC}$ 

Idmt	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
------	---------------------------------------	---------------------------------------	---------------------------------------

2.4.5.2.2 [51N]  $I_e >>$ 

$I_e >> ?$	<input type="checkbox"/> YES	<input type="checkbox"/> NO		
$I_e >>$	len			
Delay Type	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT	<input type="checkbox"/> RI	<input type="checkbox"/> LABOR.

2.4.5.2.2.1 [51N]  $I_e >> \text{DMT}$ 

$tI_e >>$	ms
t Reset	ms

2.4.5.2.2.2 [51N]  $I_e >> \text{IDMT}$ 

Idmt	<input type="checkbox"/>	IEC SI	<input type="checkbox"/>	IEC STI
	<input type="checkbox"/>	IEC VI	<input type="checkbox"/>	IEC EI
	<input type="checkbox"/>	IEC LTI	<input type="checkbox"/>	CO2
	<input type="checkbox"/>	IEEE MI	<input type="checkbox"/>	CO8
	<input type="checkbox"/>	IEEE VI	<input type="checkbox"/>	IEEE EI
	<input type="checkbox"/>	IEEE RC		
Tms				

2.4.5.2.2.3 [51N]  $I_{\phi}>>$  DMT reset time

t Reset	ms
---------	----

2.4.5.2.2.4 [51N]  $I_{\phi}>>$  IDMT reset time

Rtms	
------	--

2.4.5.2.2.5 [51N]  $I_{\phi}>>$  RI

K	
t Reset	ms

2.4.5.2.2.6 [51N]  $I_{\phi}>>$  LABORELEC

ldmt	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
------	----------------------------	----------------------------	----------------------------

2.4.5.2.3 [51N]  $I_{\phi}>>>$ 

$I_{\phi}>>>$ ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_{\phi}>>>$ Sample	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_{\phi}>>>$	len	
tl $_{\phi}>>>$	ms	

## 2.4.5.3 [49] THERMAL OVERLOAD

[49] Therm OL ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_{\theta}>$	In	
Te	mn	
k		
$\theta$ Trip	%	
[49] $\theta$ Alarm ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$\theta$ Alarm	%	

2.4.5.4 [37] UNDERCURRENT  $I_{<}$ 

$I_{<}$ ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
$I_{<}$	%	
tl $_{<}$	ms	

2.4.5.5 [46] Negative phase sequence overcurrent  $I_{2>}$ 

I2>?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
I2>	In		
Delay Trip	<input type="checkbox"/> IDMT	<input type="checkbox"/> DMT	<input type="checkbox"/> RI

2.4.5.5.1 [46]  $I_{2>}$  DMT

tl $_{2>}$	ms
------------	----



## 2.4.5.5.2 [46] I2&gt; IDMT

Idmt	<input type="checkbox"/>	IEC SI	<input type="checkbox"/>	IEC STI
	<input type="checkbox"/>	IEC VI	<input type="checkbox"/>	IEC EI
	<input type="checkbox"/>	IEC LTI	<input type="checkbox"/>	CO2
	<input type="checkbox"/>	IEEE MI	<input type="checkbox"/>	CO8
	<input type="checkbox"/>	IEEE VI	<input type="checkbox"/>	IEEE EI
Tms				

## 2.4.5.5.3 [46] I2&gt; DMT reset time

t Reset	ms
---------	----

## 2.4.5.5.4 [46] I2&gt; IDMT reset time

Rtms	
------	--

## 2.4.5.5.5 [46] I2&gt; RI

K	
t Reset	ms

## 2.4.5.6 [46] Negative phase sequence overcurrent I2&gt;&gt;

I2>>?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I2>>	In	
tI2>>	ms	

## 2.4.5.7 [79] AUTORECLOSER

[79] Autoreclose ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Ext CB Fail ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Ext CB Fail Time	ms		
Ext Block ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Aux 1 (I>)	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Aux 2 (I <sub>e</sub> >)	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Dead Time tD1	ms		
Dead Time tD2	ms		
Dead Time tD3	ms		
Dead Time tD4	ms		
Reclaim Time tR	ms		
Inhib Time tI	ms		
Phase Cycles			
E/Gnd Cycles			
CYCLES tI>	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>
			1 <input type="checkbox"/>

CYCLES tl>>	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>
CYCLES tl>>>	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>
CYCLES tl <sub>e</sub> >	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>
CYCLES tl <sub>e</sub> >>	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>
CYCLES tl <sub>e</sub> >>>	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>
CYCLES tAux 1	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>
CYCLES tAux 2	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>

## 2.4.6 AUTOMAT.CTRL Menu

## 2.4.6.1 TRIP Command allocation

Trip tl>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip tl>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip tl>>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip tl <sub>e</sub> >	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip tl <sub>e</sub> >>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip tl <sub>e</sub> >>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip tl<	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip tl2>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip tl2>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip Thermal θ	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip Brkn Cond	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip tAux1	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip tAux2	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip tAux3	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip tAux4	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip SOTF	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Ctrl Trip	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Trip CB Fail	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO

## 2.4.6.2 Latch function allocation

Latch tl>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tl>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tl>>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tl <sub>e</sub> >	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tl <sub>e</sub> >>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tl <sub>e</sub> >>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tl<	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tl2>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tl2>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch Thermal θ	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch Brkn . Cond	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tAux1	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tAux2	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tAux3	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch tAux4	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch SOTF	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Latch CB FAIL	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO

## 2.4.6.3 Blocking Logic 1 function allocation

Block 1 tl>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tl>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tl>>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tl <sub>e</sub> >	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tl <sub>e</sub> >>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tl <sub>e</sub> >>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tl<	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tl2>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tl2>>	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 Thermal θ	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 Brkn. Cond	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tAux1	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tAux2	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tAux3	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Block 1 tAux4	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO

## 2.4.6.4 Blocking Logic 2 function allocation

Block 2 tl>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tl>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tl>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tl <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tl <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tl <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tl<	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tl2>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tl2>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 Thermal θ	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 Brkn. Cond	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tAux1	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tAux2	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tAux3	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block 2 tAux4	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.4.6.5 Selective Scheme Logic1 function allocation

Logic Select 1	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Sel1 tl>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Sel1 tl>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Sel1 tl <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Sel1 tl <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
t Sel1	ms	

## 2.4.6.6 Selective Scheme Logic2 function allocation

Logic Select 2	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Sel2 tl>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Sel2 tl>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Sel2 tl <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Sel2 tl <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tSel2 =	ms	

## 2.4.6.7 OUTPUT RELAYS allocation

## 2.4.6.7.1 OUTPUT RELAYS allocation (RL2 to RL4)

Functions	RL 2		RL 3		RL 4	
Trip	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl<	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl2>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl2>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Therm Alarm	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Therm Trip	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Brkn Cond	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Fail	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Close	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tAux1	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tAux2	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tAux3	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tAux4	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Alarm	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
52 Fail	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
79 Run	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
79 Trip	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO

Functions	RL 2		RL 3		RL 4	
Order COM 1	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Order COM 2	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Order COM 3	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Order COM 4	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Active Group	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
SOTF	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Control Trip	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Control Close	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.4.6.7.2 OUTPUT RELAYS allocation (RL5 to RL8)

Functions	RL 5		RL 6		RL 7		RL8	
Trip	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>e</sub> >>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl<	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl2>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl2>>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Therm Alarm	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Therm Trip	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Brkn Cond	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Fail	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Close	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tAux1	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tAux2	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tAux3	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tAux4	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Alarm	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
52 Fail	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
79 Run	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
79 Trip	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO

Functions	RL 5		RL 6		RL 7		RL 8	
Order COM 1	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Order COM 2	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Order COM 3	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Order COM 4	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Active Group	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
SOTF	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Control Trip	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Control Close	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO



## 2.4.6.8 LOGIC INPUT allocation

## 2.4.6.8.1 Inputs

Input 1	<input type="checkbox"/> None	<input type="checkbox"/> Unlatch	<input type="checkbox"/> 52a
	<input type="checkbox"/> 52b	<input type="checkbox"/> CB FLT	<input type="checkbox"/> Aux 1
	<input type="checkbox"/> Aux 2	<input type="checkbox"/> Blk Log 1	<input type="checkbox"/> Blk Log 2
	<input type="checkbox"/> Strt Dist	<input type="checkbox"/> Cold L PU	<input type="checkbox"/> Log Sel 1
	<input type="checkbox"/> Log Sel 2	<input type="checkbox"/> Change Set	<input type="checkbox"/> 0 Reset
	<input type="checkbox"/> Block - 79	<input type="checkbox"/> Trip Circ	<input type="checkbox"/> Rst Led
	<input type="checkbox"/> Maint. M.	<input type="checkbox"/> Aux 3	<input type="checkbox"/> Aux 4
	<input type="checkbox"/> Strt tBF	<input type="checkbox"/> Man. Close	<input type="checkbox"/> Local
Input 2	<input type="checkbox"/> None	<input type="checkbox"/> Unlatch	<input type="checkbox"/> 52a
	<input type="checkbox"/> 52b	<input type="checkbox"/> CB FLT	<input type="checkbox"/> Aux 1
	<input type="checkbox"/> Aux 2	<input type="checkbox"/> Blk Log 1	<input type="checkbox"/> Blk Log 2
	<input type="checkbox"/> Strt Dist	<input type="checkbox"/> Cold L PU	<input type="checkbox"/> Log Sel 1
	<input type="checkbox"/> Log Sel 2	<input type="checkbox"/> Change Set	<input type="checkbox"/> 0 Reset
	<input type="checkbox"/> Block - 79	<input type="checkbox"/> Trip Circ	<input type="checkbox"/> Rst Led
	<input type="checkbox"/> Maint. M.	<input type="checkbox"/> Aux 3	<input type="checkbox"/> Aux 4
	<input type="checkbox"/> Strt tBF		
Input 3	<input type="checkbox"/> None	<input type="checkbox"/> Unlatch	<input type="checkbox"/> 52a
	<input type="checkbox"/> 52b	<input type="checkbox"/> CB FLT	<input type="checkbox"/> Aux 1
	<input type="checkbox"/> Aux 2	<input type="checkbox"/> Blk Log 1	<input type="checkbox"/> Blk Log 2
	<input type="checkbox"/> Strt Dist	<input type="checkbox"/> Cold L PU	<input type="checkbox"/> Log Sel 1
	<input type="checkbox"/> Log Sel 2	<input type="checkbox"/> Change Set	<input type="checkbox"/> 0 Reset
	<input type="checkbox"/> Block - 79	<input type="checkbox"/> Trip Circ	<input type="checkbox"/> Rst Led
	<input type="checkbox"/> Maint. M.	<input type="checkbox"/> Aux 3	<input type="checkbox"/> Aux 4
	<input type="checkbox"/> Strt tBF		
Input 4	<input type="checkbox"/> None	<input type="checkbox"/> Unlatch	<input type="checkbox"/> 52a
	<input type="checkbox"/> 52b	<input type="checkbox"/> CB FLT	<input type="checkbox"/> Aux 1
	<input type="checkbox"/> Aux 2	<input type="checkbox"/> Blk Log 1	<input type="checkbox"/> Blk Log 2
	<input type="checkbox"/> Strt Dist	<input type="checkbox"/> Cold L PU	<input type="checkbox"/> Log Sel 1
	<input type="checkbox"/> Log Sel 2	<input type="checkbox"/> Change Set	<input type="checkbox"/> 0 Reset
	<input type="checkbox"/> Block - 79	<input type="checkbox"/> Trip Circ	<input type="checkbox"/> Rst Led
	<input type="checkbox"/> Maint. M.	<input type="checkbox"/> Aux 3	<input type="checkbox"/> Aux 4
	<input type="checkbox"/> Strt tBF		

Input 5	<input type="checkbox"/> None	<input type="checkbox"/> Unlatch	<input type="checkbox"/> 52a
	<input type="checkbox"/> 52b	<input type="checkbox"/> CB FLT	<input type="checkbox"/> Aux 1
	<input type="checkbox"/> Aux 2	<input type="checkbox"/> Blk Log 1	<input type="checkbox"/> Blk Log 2
	<input type="checkbox"/> Strt Dist	<input type="checkbox"/> Cold L PU	<input type="checkbox"/> Log Sel 1
	<input type="checkbox"/> Log Sel 2	<input type="checkbox"/> Change Set	<input type="checkbox"/> $\theta$ Reset
	<input type="checkbox"/> Block - 79	<input type="checkbox"/> Trip Circ	<input type="checkbox"/> Rst Led
	<input type="checkbox"/> Maint. M.	<input type="checkbox"/> Aux 3	<input type="checkbox"/> Aux 4
	<input type="checkbox"/> Strt tBF		

## 2.4.6.8.2 tAux

Aux 1 : Time tAux 1	ms
Aux 2 : Time tAux 2	ms
Aux 3 : Time tAux 3	ms
Aux 4 : Time tAux 4	ms

## 2.4.6.9 BROKEN CONDUCTOR

Brkn Cond	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tBC	ms	
Ratio I2/I1	%	

## 2.4.6.10 Cold Load Pick up

Cold Load PU ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl>>> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>o</sub> > ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>o</sub> >> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tl <sub>o</sub> >>> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
t2> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
t2>> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
T Therm ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Level	%	
tCL	ms	

## 2.4.6.11 CIRCUIT BREAKER FAILURE

CB Fail ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
tBF	ms	
I <sub>k</sub>	In	
Block I <sub>&gt;</sub> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Block I <sub>0&gt;</sub> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.4.6.12 CIRCUIT BREAKER SUPERVISION

TC Supervision?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
t SUP	s	
CB Open S'vision	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Open Time	ms	
CB Close S'vision	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Close Time	ms	
CB Open Alarm?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CB Open NB		
Σ Amps(n)?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Σ Amps(n)		
n		
t Open Pulse	ms	
t Close Pulse	ms	

## 2.4.6.13 SOTF

SOTF?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
t SOTF	ms	
I <sub>&gt;&gt;</sub>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I <sub>&gt;&gt;&gt;</sub>	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## 2.4.7 RECORDING Menu

## 2.4.7.1 DISTURBANCE RECORD

Pre-time	ms	
Post-time	ms	
Disturb Rec Trig	<input type="checkbox"/> ON INST.	<input type="checkbox"/> ON TRIP

## 2.4.7.2 TIME PEAK VALUE

Time Window	mn
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## 2.4.7.3 ROLLING DEMAND

Sub Period	mn
Num of Sub Per.	