

**HARDWARE/SOFTWARE
VERSION
P120 P121 P122 P123
HISTORY AND
COMPATIBILITY**

P120 - Serial number – Hardware Correlation	
Serial Number	Hardware installed
From 2299001 to 4799797	HARDWARE VERSION 2
From 4799798 to 1001999	HARDWARE VERSION 3
From 1101001	HARDWARE VERSION 4

Relay Type P120				
Software Version	Date of Issue	Full Description of Changes	S1 Compatibility	Backward Compatibility with previous hardware
V1.F	11/06/99	Resolution of KITZ201 problem Modification of the output relay latching	–	HARD V 2 HARD V 3 HARD V 4
V3.B	19/11/99	Suppression of password in order to acknowledge the alarms Auto acknowledgement of the instantaneous Modbus time out of 200 ms Display of the letter P in the menu N and N-1 when password is active	•V2.0	HARD V 3 HARD V 4
V3.C	22/08/00	VDEW improvements	•V2.0	
V4.A	15/03/01	Integration of DNP3 protocol Management of alternative logic input Latching of the auxiliary output relay by relay and not by function The digital input can work with AC signals (100 to 250 V AC)	•V2.0	HARD V 4
V4.D	27/08/02	Courier improvment : adding of the cell 0010 (CB control) IEC103 : correction of the checksum calculation for short message.	•V2.0	HARD V 4
V6.A	18/06/03	Add periodic self test of EEPROM data / calibration every 24 hours with safeguard of the results in safeguarded RAM. Add a new major alarm "Default settings" which is set after an EEPROM data error, and the following reloading of the default settings, and automatically reset after the following parameter write. IEC870-5-103 communication : - add ASDU 3.4 for measurement IN, instead of private ASDU 77, for setting in conformity with the standard (cf P127).	V2.07	Two versions HARD 3 <u>or</u> HARD 4 (HARD 2 → *)

Relay Type P120				
Software Version	Date of Issue	Full Description of Changes	S1 Compatibility	Backward Compatibility with previous hardware
V6.C	07/04/04	<p><u>Software changes implemented in this version</u></p> <p>MODBUS communication: added MODBUS address filtering (rear panel).</p> <p><u>Software improvement in this version</u></p> <p>Modification to process leds for instantaneous alarms when they are self-acknowledged by the trip, or another instantaneous alarm (before this fix, these instantaneous alarms were not visible on configured leds). (Same fix than for P121).</p> <p>Modification to fix upload program for FPGA of new CPU board (index E or higher).</p> <p>Modification on 3rd threshold delay le>>>, whose limitation test was done on 1st threshold delay le>.</p>	V2.07	<p>Two versions HARD 3 <u>or</u> HARD 4</p> <p>(HARD 2 → *)</p>

P121 - Serial number – Hardware Correlation	
Serial Number	Hardware installed
From 2599001 to 4799797	HARDWARE VERSION 2
From 4799798 to 0801999	HARDWARE VERSION 3
From 0901001	HARDWARE VERSION 4

Relay Type P121				
Software Version	Date of Issue	Full Description of Changes	S1 Compatibility	Backward Compatibility with previous hardware
V2.J	30/08/99	MODBUS improvement : Correction of al encountered problem (answer to a synchronisation telegram, creation of a 2 seconds time out ...)	–	HARD V 2 HARD V 3 HARD V 4
V3.B	19/11/99	Suppression of password in order to acknowledge the alarms Auto acknowledgement of the instantaneous Modbus time out of 200 ms Display of the letter P in the menu N and N-1 when password is active	•V2.0	HARD V 3 HARD V 4
V3.C	25/01/00	Evolution of Modbus writing 16 bits	•V2.0	
V3.E	16/03/00	Czech and Hungarian version delivery	•V2.0	
V3.G	22/08/00	VDEW improvements	•V2.0	
V4.E	31/01/01	<u>Latch of the output relays</u> Latch of the auxiliary relays, relay by relay and not by function (like previously up to V3 version). On the other hand the latch of the TRIP output relay remains by function. If the auxiliary relays are latched, no alarm is displayed. For an aknowledgment of the latch the user has to go in the OP-PARAMETERS/Relay status Menu and push on the «Ⓢ» clear push button. DNP3 level 2 and 3 Addition of the tripping and closing order for IEC103 The digital input can work with AC signals (100 to 250 V AC)	•V2.0	HARD V 4
V5.D	31/01/01	Improvement of the english labels.	•V2.0	
V5.F	08/08/02	Courier improvment : adding of the cell 0010 (CB control) IEC103 : correction of the checksum calculation for short message.	•V2.0	HARD V 4

Relay Type P121				
Software Version	Date of Issue	Full Description of Changes	S1 Compatibility	Backward Compatibility with previous hardware
V5.G	24/10/02	Added Private messages option (for non standard protection functions) in IEC870-5-103 communication.	V2.07	Two versions HARD 3 <u>or</u> HARD 4 (HARD 2 → *)
V6.A	18/06/03	<p>Add periodic self test of EEPROM data / calibration every 24 hours with safeguard of the results in safeguarded RAM.</p> <p>Add a new major alarm "Default settings" which is set after an EEPROM data error, and the following reloading of the default settings, and automatically reset after the following parameter write.</p> <p>IEC870-5-103 communication :</p> <ul style="list-style-type: none"> - add ASDU 3.4 for measurement IN, instead of private ASDU 77, for setting in conformity with the standard (cf P127). 	V2.09	Two versions HARD 3 <u>or</u> HARD 4 (HARD 2 → *)
V6.B	18/07/03	<p>Improvement of the reading of the alarm "EEPROM DATA FAULT" when much access EEPROM is done :</p> <ul style="list-style-type: none"> - Optimization of the readings in E2PROM (writing of the value of the checksums in internal RAM). - The function of access to the E2PROM becomes protected from the interruptions. 	V2.09	Two versions HARD 3 <u>or</u> HARD 4 (HARD 2 → *)
V6.C	28/11/03	<p><u>Software changes implemented in this version</u></p> <ul style="list-style-type: none"> - Modif. treatment of the thermal model: 20 milliseconds instead of 100. - Evolutions communication MODBUS: addition of the read quick byte (Function 7) by reading of words (Function 03 or 04), and of the reading of the date (on page 8). - Communication MODBUS Front Face: addition of the filtering of address. <p><u>Software improvement done in this version</u></p> <p>Fix on RI curves processing in certain cases.</p>	V2.10	Two versions HARD 3 <u>or</u> HARD 4 (HARD 2 → *)
V6.D	11/12/03	<p><u>Software improvement done in this version</u></p> <p>Modification to remove the taking into account of the number of defect in the calculation of checksum of page 1 of E2PROM, like in autotest E2PROM.</p>	V2.10	Two versions HARD 3 <u>or</u> HARD 4 (HARD 2 → *)

Relay Type P121				
Software Version	Date of Issue	Full Description of Changes	S1 Compatibility	Backward Compatibility with previous hardware
V6.E	07/06/04	<p><u>Software changes implemented in this version</u></p> <p>DNP3 modifications : Binary inputs move to Class 0. Acceptance of variation 2 object 1.</p> <p>Modified German texts for Front panel.</p> <p><u>Software improvement done in this version</u></p> <p>Modification to fix upload program for FPGA of new CPU board (index E or higher).</p> <p>Fixed checksum verification test in Front panel MODBUS communication.</p> <p>Fixed a shift in the fault numbers introduced by error since V6.A and V6.B.</p>	V2.10	<p>Two versions HARD 3 <u>or</u> HARD 4</p> <p>(HARD 2 → *)</p>
V6.G	11/01/05	<p><u>Software changes implemented in this version</u></p> <p>Possibility to come back to the head line of the menu by pressing Clear Button.</p> <p><u>Software improvement done in this version</u></p> <p>None.</p>	V2.12	<p>Two versions HARD 3 <u>or</u> HARD 4</p> <p>(HARD 2 → *)</p>

Relay Type P121				
Software Version	Date of Issue	Full Description of Changes	S1 Compatibility	Backward Compatibility with previous hardware
P122 - Serial number – Hardware Correlation				
Serial Number		Hardware installed		
From 2599001 to 4799797		HARDWARE VERSION 2		
From 4799798 to 0801999		HARDWARE VERSION 3		
From 0901001		HARDWARE VERSION 4		

Relay Type P122				
Software Version	Date of Issue	Full Description of Changes	S1 Compatibility	Backward Compatibility with previous hardware
V2.J	30/08/99	MODBUS improvement : Correction of al encountered problem (answer to a synchronisation telegram, creation of a 2 seconds time out ...)	–	HARD V 2 HARD V 3 HARD V 4
V3.B	29/11/99	Suppression of password in order to acknowledge the alarms Auto acknowledgement of the instantaneous Modbus time out of 200 ms Display of the letter P in the menu N and N-1 when password is active	•V2.0	HARD V 3 HARD V 4
V3.C	06/01/00	Label correction	•V2.0	
V3.D	06/04/00	Evolution of Modbus writing 16 bits	•V2.0	
V3.E	16/03/00	Czech and Hungarian version delivery	•V2.0	
V3.G	22/08/00	VDEW improvements	•V2.0	

Relay Type P122				
Software Version	Date of Issue	Full Description of Changes	S1 Compatibility	Backward Compatibility with previous hardware
V4.E	31/01/01	<p><u>Latch of the output relays</u> Latch of the auxiliary relays, relay by relay and not by function (like previously up to V3 version). On the other hand the latch of the TRIP output relay remains by function. If the auxiliary relays are latched, an alarm will be displayed. If the user acknowledges this alarm, the auxiliary relays will be delatched.</p> <p><u>DNP3 level 2 and 3</u> Addition of the tripping and closing order for IEC103 Phase rotation (ABC or ACB) Third threshold algorithm for improvement of the behaviour on saturated current transformers Timer for the undercurrent feature (0 to 150 sec) Tripping curves (rectifier curve + LABORELLEC curves) Selection of the Setting group by level or by edge. CB fail detection (possibility to inhibit the starting signals) Instantaneous record Rolling demand Peak value demand Instantaneous alarm settable : self or not self reset Matrix for the autorecloser The digital input can work with AC signals signals (24 V to 250 V AC) Necessity to set in HMI Configuration menu, the type of voltage used, either AC or DC</p>	•V2.0	HARD V 4
V5.A	27/09/01	<p>Maintenance mode for manual command of the output relays</p> <p>Reset of leds by logic input or control command or front panel or on new fault appearance</p> <p>Addition of negative sequence protection feature (ANSI code 46) with two thresholds</p> <p>Addition of the CB supervision feature.</p>	•V2.0	
V5.C	04/10/01	<p>VDEW improvements (Updating of the information SCN into the ASDU END OF GENERAL INTERROGATION)</p>	•V2.0	HARD V 4
V5.D	30/01/02	<p>Addition of order COM1/COM2/COM3/COM4 assignalble on the auxiliary relays.</p> <p>Addition of the logic inputs AUX3 and AUX 4 do not genrating alarm message.</p> <p>Improvement of english label</p>	•V2.0	

Relay Type P122				
Software Version	Date of Issue	Full Description of Changes	S1 Compatibility	Backward Compatibility with previous hardware
V5.F	08/08/02	<p>EA approval option : logical input filtering on 24 samples instead of 12 either 15 ms at 50 Hz)</p> <p>Improvement of the Recording of rolling demand in ram saved. The previous version could lead to an untimely ram saved error message due to the management of this recording</p> <p>Courier improvement : adding of the cell 0010 (CB control) protected by password</p> <p>Correction of the configuration of taux3 and taux4 for MODBUS</p> <p>IEC103 : correction of the checksum calculation for short message. Correction of the I0 channel data into the disturbance record</p>	•V2.0	HARD V 4
V5.G	24/10/02	Added Private messages option option (for non standard protection functions) in IEC870-5-103 communication	V2.07	Two versions HARD 3 <u>or</u> HARD 4 (HARD 2 → *)
V6.A	18/06/03	<p>Add periodic self test of EEPROM data / calibration every 24 hours with safeguard of the results in safeguarded RAM.</p> <p>Add a new major alarm "Default settings" which is set after an EEPROM data error, and the following reloading of the default settings, and automatically reset after the following parameter write.</p> <p>Add "tReset" events for the thresholds I>, I>>, IN>, IN>> and I2>, and "tReset" parameter for the constant time temporization (thresholds I>, I>>, IN> and IN>>).</p> <p>Add "sample" parameter (Yes=Sample or No=RMS values) for the third thresholds I>>> and IN>>>.</p> <p>Add "CB Fail" choice for the "Trip functions" and "Latch functions" parameters. Add "tBF" event.</p> <p>IEC870-5-103 communication :</p> <ul style="list-style-type: none"> - add ASDU 3.4 for measurement IN, instead of private ASDU 77, for setting in conformity with the standard (cf P127). - various improvements : in the management of the validity of the date and season in the messages, modifications in acknowledgement of the orders and time synchronization. 	V2.09	Two versions HARD 3 <u>or</u> HARD 4 (HARD 2 → *)

Relay Type P122				
Software Version	Date of Issue	Full Description of Changes	S1 Compatibility	Backward Compatibility with previous hardware
V6.B	18/07/03	<p>Improvement of the reading of major alarm "EEPROM DATA FAULT" appearing when much access EEPROM is done :</p> <ul style="list-style-type: none"> - Optimization of the readings in E2PROM (writing of the value of the checksums in internal RAM). - Replacement of the data storage circuit breaker in E2PROM by a storage in safeguarded RAM. - The function of access to the E2PROM becomes protected from the interruptions. 	V2.09	<p>Two versions HARD 3 <u>or</u> HARD 4</p> <p>(HARD 2 → *)</p>
V6.C	28/11/03	<p><u>Software changes implemented in this version</u></p> <ul style="list-style-type: none"> - Addition of function SOFT/TOR: Function allowing send a tripping order without awaiting temporization of release, addition of manual logical input closed (order of manual closing). - Addition of function LOCAL/REMOTE by wiring: addition of logical input LOCAL MODE (mode switch-over local, for inhibition of the writing orders the communication), and addition of exits CONTROL TRIP (remote control of release) and CLOSED CONTROL operate by remote control trip). - Modif. treatment of the thermal model: 20 milliseconds instead of 100. - Evolutions communication MODBUS: addition of the read quick byte (Function 7) by reading of words (Function 03 or 04), and of the reading of the date (on page 8). - Communication MODBUS Front Face: addition of the filtering of address. <p><u>Software improvement done in this version</u></p> <p>Fix on RI curves processing in certain cases.</p>	V2.10	<p>Two versions HARD 3 <u>or</u> HARD 4</p> <p>(HARD 2 → *)</p>
V6.D	11/12/03	<p><u>Software improvement done in this version</u></p> <p>Modification to remove the taking into account of the number of defect in the calculation of checksum of page 1 of E2PROM, like in autotest E2PROM.</p>	V2.10	<p>Two versions HARD 3 <u>or</u> HARD 4</p> <p>(HARD 2 → *)</p>

Relay Type P122				
Software Version	Date of Issue	Full Description of Changes	S1 Compatibility	Backward Compatibility with previous hardware
V6.E	07/06/04	<p><u>Software changes implemented in this version</u></p> <p>Modified recloser function : modified taking in account of manual reclose while blocking by recloser external input.</p> <p>Added a new DNP3 function : fault data can be accessed as analog inputs.</p> <p>DNP3 modifications : Binary inputs move to Class 0. Acceptance of variation 2 object 1.</p> <p>Modified German texts for Front panel.</p> <p><u>Software improvement done in this version</u></p> <p>Modification to fix upload program for FPGA of new CPU board (index E or higher).</p> <p>Improvement on 3rd threshold delay le>>>, whose limitation test was done on 1st threshold delay le>.</p> <p>Improved SOFT/TOR function.</p> <p>Improved Breaker Fail alarm processing</p> <p>Fixed checksum verification test in Front panel MODBUS communication.</p>	V2.10	<p>Two versions HARD 3 <u>or</u> HARD 4</p> <p>(HARD 2 → *)</p>
V6.F	08/10/04	<p><u>Software changes implemented in this version</u></p> <p>None.</p> <p><u>Software improvements done in this version</u></p> <p>Improved KBUS/COURIER protocol.</p> <p>IEC870-5-103 protocol : Enhancement to improve all the system product line defect report (RFA disturbance transmission).</p>	V2.10	<p>Two versions HARD 3 <u>or</u> HARD 4</p> <p>(HARD 2 → *)</p>
V6.G	11/01/05	<p><u>Software changes implemented in this version</u></p> <p>Possibility to come back to the head line of the menu by pressing Clear Button. The setting group change will be done in exclusive way either by setting, either by logic input. The logic input will be active on level. The choice between level or edge is suppressed.</p> <p><u>Software improvements done in this version</u></p> <p>Software improvement done in this version WThe blocking logic feature can be used with a temporisation of the phase or earth current threshold set to zero.</p>	V2.12	<p>Two versions HARD 3 <u>or</u> HARD 4</p> <p>(HARD 2 → *)</p>

P123 - Serial number – Hardware Correlation	
Serial Number	Hardware installed
From 2599001 to 4799797	HARDWARE VERSION 2
From 4799798 to 0801999	HARDWARE VERSION 3
From 0901001	HARDWARE VERSION 4

Relay Type P123				
Software Version	Date of Issue	Full Description of Changes	S1 Compatibility	Backward Compatibility with previous hardware
V2.J	30/08/99	MODBUS improvement : Correction of al encountered problem (answer to a synchronisation telegram, creation of a 2 seconds time out ...)	–	HARD V 2 HARD V 3 HARD V 4
V3.B	29/11/99	Suppression of password in order to acknowledge the alarms Auto acknowledgement of the instantaneous Modbus time out of 200 ms Display of the letter P in the menu N and N-1 when password is active	•V2.0	HARD V 3 HARD V 4
V3.C	06/01/00	Label correction	•V2.0	
V3.D	06/04/00	Evolution of Modbus writing 16 bits	•V2.0	
V3.E	13/04/00	Czech and Hungarian version delivery	•V2.0	
V3.G	22/08/00	VDEW improvements	•V2.0	

Relay Type P123				
Software Version	Date of Issue	Full Description of Changes	S1 Compatibility	Backward Compatibility with previous hardware
V4.E	31/01/01	<p><u>Latch of the output relays</u> Latch of the auxiliary relays, relay by relay and not by function (like previously up to V3 version). On the other hand the latch of the TRIP output relay remains by function. If the auxiliary relays are latched, an alarm will be displayed. If the user acknowledges this alarm, the auxiliary relays will be delatched.</p> <p><u>DNP3 level 2 and 3</u> Addition of the tripping and closing order for IEC103 Phase rotation (ABC or ACB) Third threshold algorithm for improvement of the behaviour on saturated current transformers Timer for the undercurrent feature (0 to 150 sec) Tripping curves (rectifier curve + LABORELLEC curves) Selection of the Setting group by level or by edge. CB fail detection (possibility to inhibit the starting signals) Instantaneous record Rolling demand Peak value demand Instantaneous alarm settable : self or not self reset Matrix for the auto-recloser Addition of a second threshold with definite time for the I2 feature The digital input can work with AC signals (24 V to 250 V AC) Necessity to set in HMI Configuration menu, the type of voltage used, either AC or DC .</p>	•V2.0	HARD V 4
V5.A	27/09/01	<p>Maintenance mode for manual command of the output relays</p> <p>Reset of leds by logic input or control command or front panel or on new fault appearance</p>	•V2.0	HARD V4
V5.C	04/10/01	<p>VDEW improvements</p> <p>(Updating of the information SCN into the END OF GENERAL INTERROGATION ASDU)</p>	•V2.0	
V5.D	30/01/02	<p>Addition of order COM1/COM2/COM3/COM4 assignable on the auxiliary relays.</p> <p>Addition of the logic inputs AUX3 and AUX 4 do not generating alarm message.</p> <p>Improvement of english label</p>	•V2.0	

Relay Type P123				
Software Version	Date of Issue	Full Description of Changes	S1 Compatibility	Backward Compatibility with previous hardware
V5.F	08/08/02	EA approval option : logical input filtering on 24 samples instead of 12 either 15 ms at 50 Hz) Improvement of the Recording of rolling demand in ram saved. The previous version could lead to an untimely ram saved error message due to the management of this recording Courier improvement : adding of the cell 0010 (CB control) protected by password Correction of the configuration of taux3 and taux4 for MODBUS IEC103 : correction of the checksum calculation for short message. Correction of the I0 channel data into the disturbance record	•V2.0	HARD V4
V5.G	24/10/02	Added Private messages option option (for non standard protection functions) in IEC870-5-103 communication	V2.07	Two versions HARD 3 <u>or</u> HARD 4 (HARD 2 → *)
V6.A	18/06/03	Add periodic self test of EEPROM data / calibration every 24 hours with safeguard of the results in safeguarded RAM. Add a new major alarm "Default settings" which is set after an EEPROM data error, and the following reloading of the default settings, and automatically reset after the following parameter write. Add "tReset" events for the thresholds I>, I>>, IN>, IN>> and I2>, and "tReset" parameter for the constant time temporization (thresholds I>, I>>, IN> and IN>>). Add "sample" parameter (Yes=Sample or No=RMS values) for the third thresholds I>>> and IN>>>. Add "CB Fail" choice for the "Trip functions" and "Latch functions" parameters. Add "tBF" event. IEC870-5-103 communication : - add ASDU 3.4 for measurement IN, instead of private ASDU 77, for setting in conformity with the standard (cf P127). - various improvements : in the management of the validity of the date and season in the messages, modifications in acknowledgement of the orders and time synchronization.	V2.09 Patch Modbus V2.08.005	Two versions HARD 3 <u>or</u> HARD 4 (HARD 2 → *)

Relay Type P123				
Software Version	Date of Issue	Full Description of Changes	S1 Compatibility	Backward Compatibility with previous hardware
V6.B	18/07/03	<p>Improvement of the reading of major alarm "EEPROM DATA FAULT" appearing when much access EEPROM is done :</p> <ul style="list-style-type: none"> - Optimization of the readings in E2PROM (writing of the value of the checksums in internal RAM). - Replacement of the data storage circuit breaker in E2PROM by a storage in safeguarded RAM. - The function of access to the E2PROM becomes protected from the interruptions. 	V2.09 Patch Modbus V2.08.005	Two versions HARD 3 <u>or</u> HARD 4 (HARD 2 → *)
V6.C	28/11/03	<p><u>Software changes implemented in this version</u></p> <ul style="list-style-type: none"> - Addition of function SOFT/TOR: Function allowing send a tripping order without awaiting temporization of release, addition of manual logical input closed (order of manual closing). - Addition of function LOCAL/REMOTE by wiring: addition of logical input LOCAL MODE (mode switch-over local, for inhibition of the writing orders the communication), and addition of exits CONTROL TRIP (remote control of release) and CLOSED CONTROL operate by remote control trip). - Modif. treatment of the thermal model: 20 milliseconds instead of 100. - Evolutions communication MODBUS: addition of the read quick byte (Function 7) by reading of words (Function 03 or 04), and of the reading of the date (on page 8). - Communication MODBUS Front Face: addition of the filtering of address. <p><u>Software improvements done in this version</u></p> <p>Fix on RI curves processing in certain cases.</p>	V2.10	Two versions HARD 3 <u>or</u> HARD 4 (HARD 2 → *)
V6.D	11/12/03	<p><u>Software improvements done in this version</u></p> <p>Modification to remove the taking into account of the number of defect in the calculation of checksum of page 1 of E2PROM, like in autotest E2PROM.</p>	V2.10	Two versions HARD 3 <u>or</u> HARD 4 (HARD 2 → *)

Relay Type P123				
Software Version	Date of Issue	Full Description of Changes	S1 Compatibility	Backward Compatibility with previous hardware
V6.E	07/06/04	<p><u>Software changes implemented in this version</u></p> <p>Modified recloser function : modified taking in account of manual reclose while blocking by recloser external input.</p> <p>Added a new DNP3 function : fault data can be accessed as analog inputs.</p> <p>DNP3 modifications : Binary inputs move to Class 0. Acceptance of variation 2 object 1.</p> <p>Modified German texts for Front panel.</p> <p><u>Software improvement done in this version</u></p> <p>Modification to fix upload program for FPGA of new CPU board (index E or higher). (This problem affects all Px2x products equipped with this CPU board).</p> <p>Modification on 3rd threshold delay le>>>, whose limitation test was done on 1st threshold delay le>.</p> <p>Improved SOFT/TOR function</p> <p>Improved Breaker Fail alarm processing.</p> <p>Improved checksum verification test in Front panel MODBUS communication.</p>	V2.10	<p>Two versions HARD 3 <u>or</u> HARD 4</p> <p>(HARD 2 → *)</p>
V6.F	08/10/04	<p><u>Software changes implemented in this version</u></p> <p>None.</p> <p><u>Software improvement done in this version</u></p> <p>Improved KBUS/COURIER protocol (visibility of threshold).</p> <p>Improved IEC870-5-103 protocol : Enhancement of all the system product line defect report (RFA disturbance transmission).</p>	V2.10	<p>Two versions HARD 3 <u>or</u> HARD 4</p> <p>(HARD 2 → *)</p>

Relay Type P123				
Software Version	Date of Issue	Full Description of Changes	S1 Compatibility	Backward Compatibility with previous hardware
V6.G	11/01/05	<p><u>Software changes implemented in this version</u></p> <p>Possibility to come back to the head line of the menu by pressing Clear Button.</p> <p>The setting group change will be done in exclusive way either by setting, either by logic input. The logic input will be active on level. The choice between level or edge is suppressed.</p> <p>Modification to the management of " the auto-recloser in progress " information and generation of associated event: - Pick-up: at the start of the reclose cycle -> RL1 trip. - Drop-off: at the end of the last programmed cycle -> At the end of reclaim time for a successful reclose cycle or at release of "Final Trip" signal for an unsuccessful cycle. Modification of the " final trip " information management. This information must be now set to one during the last tripping (if default is always present and that the cycles are totally used) and must be set to zero as soon as the circuit breaker is done (supervision of the 52a information). Also, it should be kept at zero until the end of inhibits time (see also below connection with the " Recloser locked " signal status). The locked auto-recloser information must be set to the output relays and different from the "final trip" information. It will be reset at the end of the inhibit time.</p> <p><u>Software improvement done in this version</u></p> <p>The blocking logic feature can be used with a temporisation of the phase or earth current threshold set to zero.</p>	V2.12	Two versions HARD 3 <u>or</u> HARD 4 (HARD 2 → *)