

## Leistungsschild Trennschalter

Kunde: US Steel  
Auftrags-Nr.: 063-621-6602  
Fabrik-Nr.: 4824-40-2020996  
Stückzahl: 2

KST: 1595  
Sprache: slowakisch  
ID-Nr.: SK S 1 290 317  
Projektl.: M. Kalisch  
Datum: 18.03.05

AGK/V31 Kassel / Malinowski / März 2001

Anlieferung bei AGK: 27.04.05

	
Odpojovac	
Typ	D300-121631M/E1M/N
Rok výroby	2005
Výrobné číslo	4824-40-2020996
Menovité napätie	123 kV
Men.rázové vydr. napätie	630/550 kV
Men. zap. výdr. napätie	31,5 kV
Men. prúd	- A
Men. rázový prúd	80 kA
Men.skratový prúd	1s 31,5 kA
Men. ťah svoriek	1500 N
Váha pólu	235 kg
SK S 1 290 317 Made in Germany	

/ 1 ... 2 A, B, C


# Leistungsschild Motorantrieb T

Kunde: US Steel  
Auftrags-Nr.: 063-621-6602  
Fabrik-Nr.: 4824-40-2020996  
Stückzahl: 2

KST: 1595  
Sprache: slowakisch  
ID-Nr.: SK S 1 290 318  
Projektl.: M. Kalisch  
Datum: 18.03.05

AGK/V31 Kassel / Malinowski / März 2001

Anlieferung: 27.04.05

			
Motorický pohon Typ		CMM 01 T	
Rok výroby		2005	
Výrobné číslo		4824-40-2020996 / 1 ... 2	
U <sub>N</sub>	AC	380	V
P <sub>N</sub>		220	W
SK S 1 290 318		Made in Germany	


## Leistungsschild Motorantrieb E1

Kunde: US Steel  
Auftrags-Nr.: 063-621-6602  
Fabrik-Nr.: 4824-40-2020996  
Stückzahl: 2

KST: 1595  
Sprache: slowakisch  
ID-Nr.: SK S 1290 318  
Projektl.: M. Kalisch  
Datum: 18.03.05

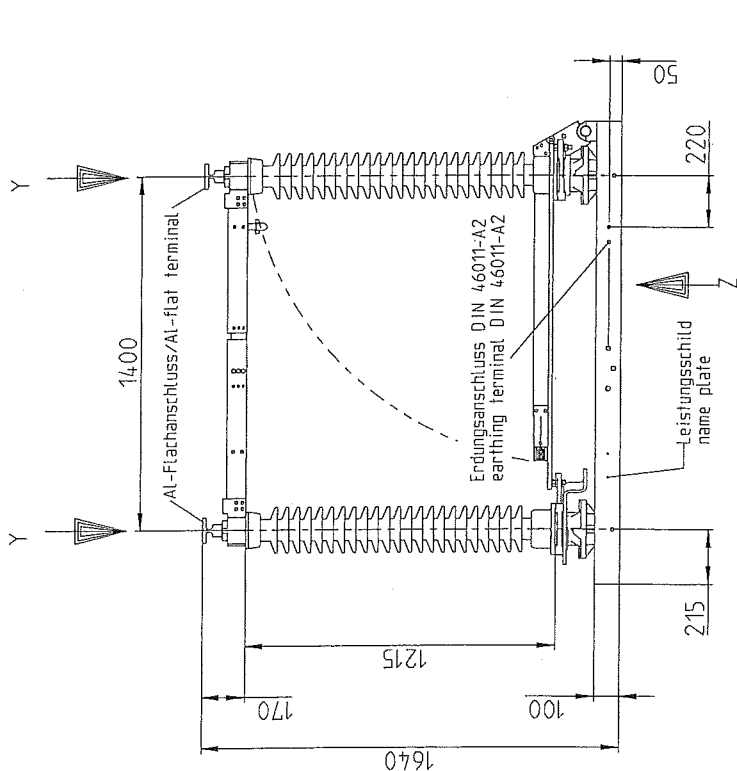
AGK/V31 Kassel / Malinowski / März 2001

Anlieferung: 27.04.05

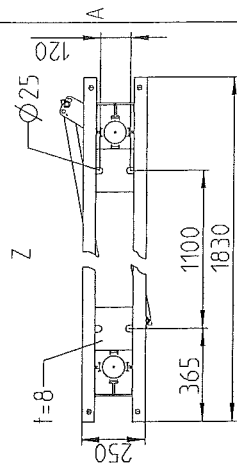
			
Motorický pohon Typ		CMM 01 E1	
Rok výroby		2005	
Výrobné číslo		4824-40-2020996 / 1 ... 2	
U <sub>N</sub>	AC	380	V
P <sub>N</sub>		220	W
SK S 1 290 318		Made in Germany	

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Befestigungsmaße  
connection dimensions



# Technische Daten technical parameters

Nennspannung:  
rated voltage: 123 kV

Nenn-Betriebsstrom:  
rated current: 1600 A

Nenn-Kurzzeitstrom:  
rated short time current: 31.5 kA, 1s

Motorantrieb Trennschalter  
motor drive disconnecting switch

CMM 01  
118 mm

Motorantrieb Erdungsschalter  
motor drive earthing switch

CMM 01  
92 mm

Gewichte pro Pol  
weights per pole

210 kg

Trennschalter:  
disconnecting switch:

25 kg

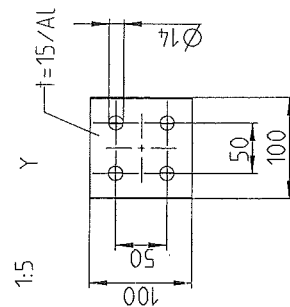
Erdungsschalter:  
earthing switch:

55 kg

Motorantrieb:  
motor drive:

55 kg

## Anschlussflaeche terminal



ERZEUGT  
DATE: 2005-03-01

NAM: GARBE

A3

MASSSTAB %

FREIGABE  
DATE: 2005-03-01

NAM: GARBE

A3

MASSSTAB %

ALLGEMEINTOLERANZ  
ISO 2768 -L-K

EC DATUM: /

EC NUMBER: /

URSPRUNG: /

TRENNSCHALTER  
DISC. SWITCH

D300-121631M/E1M/N

AREVA

AGK Kassel Germany

SEITE  
1/2

MB4824-40-2020996

REVISION  
00

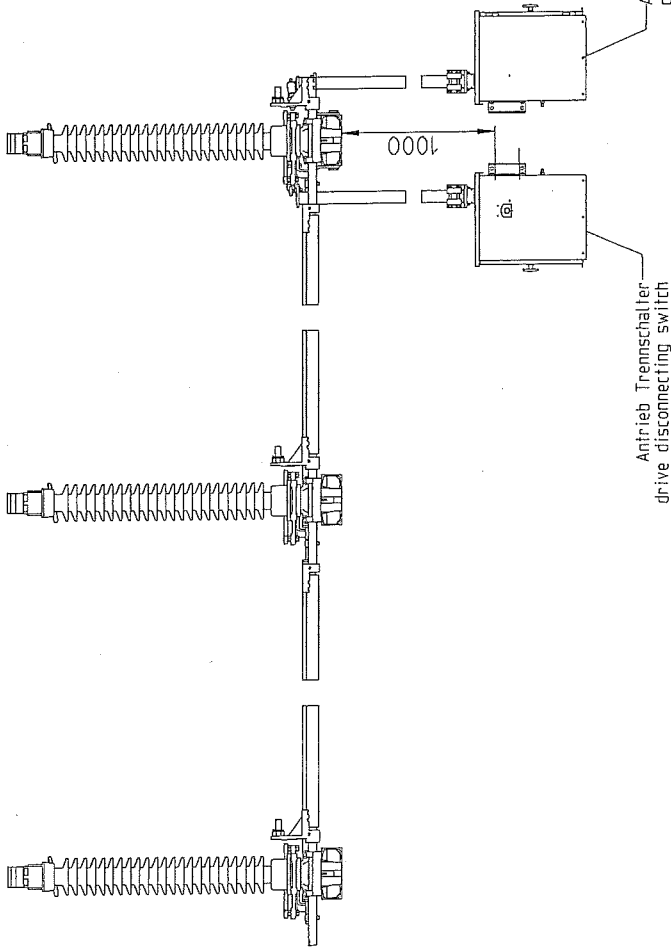
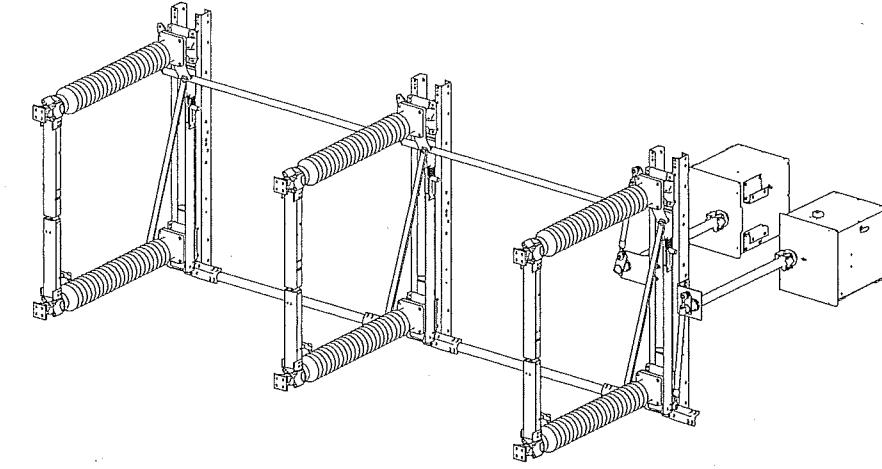
VER 0.

Modell: MB4824-40-2020996/00/0/Released

DINA3

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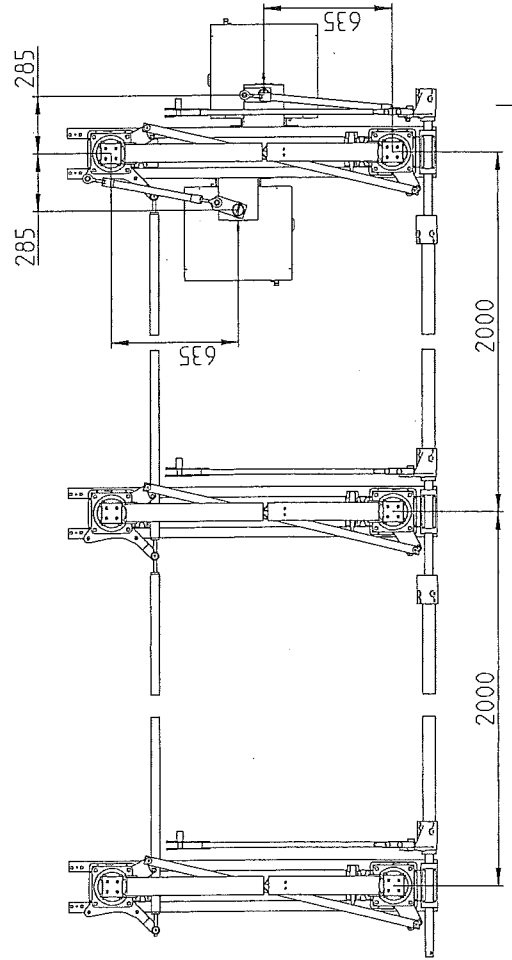
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Pol A  
pole A

Pol B  
pole B

Pol C  
pole C



ERZEUGT DATUM: 2005-03-01 NAME: GARBE	FREIGABE DATUM: 2005-03-01 NAME: GARBE	ALLGEMEINTOLERANZ ISO 2768 -CK	EC DATUM: / EC NUMBER: / URSPRUNG: /
A3		TRENNSCHALTER DISC. SWITCH	
MASSSTAB	%	D300-121631M/E1M/N	
<b>AREVA</b> AGK Kassel Germany		SEITE 2/2	REVISION 00 VER 0-
Modell: MB4824-40-2020996/00/0/Released		MB4824-40-2020996	

# Certificate of routine tests

Customer: US Steel - Slovakia

No of order: 4824 / 40

Object:

Customer ordering no.: 3234-4500066210

## Disconnecter

type: D300-121631 M/E1M/N

rated voltage: 123 kV

serial-No.: 4824-40-2020996 / 1

rated nominal current: 1600 A

## Operating mechanism

disconnecter

earthing switch

motor drive

motor drive

type:

CMM 01

CMM 01

rated supply voltage motor:

220 V DC

220 V DC

power consumption:

220 W

220 W

rated voltage control circuit:

400 V AC

400 V AC

voltage blocking magnet:

rated voltage heating:

230 V AC

230 V AC

heating capacity:

15 W

15 W

## Tests performed

### 1. Mechanical operating test

There were performed following operation cycles with the operating mechanism:

50 cycles with rated voltage, 10 cycles with 0.85 rated voltage, 10 cycles with 1,10 rated voltage

### 2. Voltage withstand tests

The tests were performed on auxiliary and control circuits with 2,0 kV and on motor and heating circuits with 1,2 kV.

### 3. Resistance of the main circuit

The measurement of the resistance with 100 A DC showed the following results:

pole a: 69  $\mu\Omega$

pole b: 68  $\mu\Omega$

pole c: 69  $\Omega$

All tests were performed successfully according to IEC 62271-102.

All measured values are within the tolerances given by AREVA.

Kassel, 24.06.2005

gez. Hornstein  
Quality assurance

## Certificate of routine tests

Customer: US Steel - Slovakia	No of order: 4824 / 40
Object:	Customer ordering no.: 3234-4500066210

### Disconnecter

type: D300-121631 M/E1M/N	rated voltage: 123 kV
serial-No.: 4824-40-2020996 / 2	rated nominal current: 1600 A

### Operating mechanism

	disconnecter	earthing switch
	motor drive	motor drive
type: CMM 01	CMM 01	CMM 01
rated supply voltage motor: 220 V DC	220 V DC	220 V DC
power consumption: 220 W	220 W	220 W
rated voltage control circuit: 400 V AC	400 V AC	400 V AC
voltage blocking magnet:		
rated voltage heating: 230 V AC	230 V AC	230 V AC
heating capacity: 15 W	15 W	15 W

### Tests performed

#### 1. Mechanical operating test

There were performed following operation cycles with the operating mechanism:  
50 cycles with rated voltage, 10 cycles with 0.85 rated voltage, 10 cycles with 1,10 rated voltage

#### 2. Voltage withstand tests

The tests were performed on auxiliary and control circuits with 2,0 kV and on motor and heating circuits with 1,2 kV.

#### 3. Resistance of the main circuit

The measurement of the resistance with 100 A DC showed the following results:

pole a: 61 $\mu\Omega$	pole b: 65 $\mu\Omega$	pole c: 71 $\Omega$
------------------------	------------------------	---------------------

All tests were performed successfully according to IEC 62271-102.  
All measured values are within the tolerances given by AREVA.

Kassel, 24.06.2005

gez. Hornstein  
Quality assurance


## Leistungsschild Trennschalter

Kunde: US Steel  
Auftrags-Nr.: 063-621-6602  
Fabrik-Nr.: 4824-50-2020996  
Stückzahl: 3

KST: 1595  
Sprache: slowakisch  
ID-Nr.: SK S 1 290 317  
Projektl.: M. Kalisch  
Datum: 18.03.05

AGK/V31 Kassel / Malinowski / März 2001

Anlieferung bei AGK: 27.04.05

	
Odpojovac	
Typ	D300-122031M/H
Rok výroby	2005
Výrobné číslo	4824-50-2020996
Menovité napätie	123 kV
Men.rázové vydr. napätie	630/550 kV
Men. zap. výdr. napätie	31,5 kV
Men. prúd	- A
Men. rázový prúd	80 kA
Men.skratový prúd	1s 31,5 kA
Men. ťah svoriek	1500 N
Váha pólu	210 kg
SK S 1 290 317 Made in Germany	

/ 1 ... 3 A, B, C




# Leistungsschild Motorantrieb T

Kunde: US Steel  
Auftrags-Nr.: 063-621-6602  
Fabrik-Nr.: 4824-50-2020996  
Stückzahl: 3

KST: 1595  
Sprache: slowakisch  
ID-Nr.: SK S 1 290 318  
Projektl.: M. Kalisch  
Datum: 18.03.05

AGK/V31 Kassel / Malinowski / März 2001

Anlieferung: 27.04.05

			
Motorický pohon Typ		CMM 01 T	
Rok výroby		2005	
Výrobné číslo		4824-50-2020996 / 1 ... 3	
U <sub>N</sub>	AC	380	V
P <sub>N</sub>		220	W
SK S 1 290 318		Made in Germany	

# Certificate of routine tests

Customer: US Steel - Slovakia	No of order: 4824 / 50
Object:	Customer ordering no.: 3234-4500066210

## Disconnecter

type: D300-122031 M/H	rated voltage: 123 kV
serial-No.: 4824-50-2020996 / 1	rated nominal current: 2000 A

## Operating mechanism

	disconnecter
	motor drive
type: CMM 01	
rated supply voltage motor: 220 V DC	
power consumption: 220 W	
rated voltage control circuit: 400 V AC	
voltage blocking magnet:	
rated voltage heating: 230 V AC	
heating capacity: 15 W	

## Tests performed

### 1. Mechanical operating test

There were performed following operation cycles with the operating mechanism:  
50 cycles with rated voltage, 10 cycles with 0.85 rated voltage, 10 cycles with 1,10 rated voltage

### 2. Voltage withstand tests

The tests were performed on auxiliary and control circuits with 2,0 kV and on motor and heating circuits with 1,2 kV.

### 3. Resistance of the main circuit

The measurement of the resistance with 100 A DC showed the following results:

pole a: 68  $\mu\Omega$       pole b: 67  $\mu\Omega$       pole c: 68  $\Omega$

All tests were performed successfully according to IEC 62271-102.  
All measured values are within the tolerances given by AREVA.

Kassel, 23.06.2005

gez. Hornstein  
Quality assurance

# Certificate of routine tests

Customer: US Steel - Slovakia	No of order: 4824 / 50
Object:	Customer ordering no.: 3234-4500066210

## Disconnecter

type: D300-122031 M/H	rated voltage: 123 kV
serial-No.: 4824-50-2020996 / 2	rated nominal current: 2000 A

## Operating mechanism

disconnecter

motor drive

type:	CMM 01
rated supply voltage motor:	220 V DC
power consumption:	220 W
rated voltage control circuit:	400 V AC
voltage blocking magnet:	
rated voltage heating:	230 V AC
heating capacity:	15 W

## Tests performed

### 1. Mechanical operating test

There were performed following operation cycles with the operating mechanism:  
50 cycles with rated voltage, 10 cycles with 0.85 rated voltage, 10 cycles with 1,10 rated voltage

### 2. Voltage withstand tests

The tests were performed on auxiliary and control circuits with 2,0 kV and on motor and heating circuits with 1,2 kV.

### 3. Resistance of the main circuit

The measurement of the resistance with 100 A DC showed the following results:

pole a: 69 $\mu\Omega$	pole b: 69 $\mu\Omega$	pole c: 69 $\Omega$
------------------------	------------------------	---------------------

All tests were performed successfully according to IEC 62271-102.  
All measured values are within the tolerances given by AREVA.

Kassel, 23.06.2005

gez. Hornstein  
Quality assurance

# Certificate of routine tests

Customer: US Steel - Slovakia	No of order: 4824 / 50
Object:	Customer ordering no.: 3234-4500066210

## Disconnecter

type: D300-122031 M/H	rated voltage: 123 kV
serial-No.: 4824-50-2020996 / 3	rated nominal current: 2000 A

## Operating mechanism

	disconnecter
	motor drive
type: CMM 01	
rated supply voltage motor: 220 V DC	
power consumption: 220 W	
rated voltage control circuit: 400 V AC	
voltage blocking magnet:	
rated voltage heating: 230 V AC	
heating capacity: 15 W	

## Tests performed

### 1. Mechanical operating test

There were performed following operation cycles with the operating mechanism:  
50 cycles with rated voltage, 10 cycles with 0.85 rated voltage, 10 cycles with 1,10 rated voltage

### 2. Voltage withstand tests

The tests were performed on auxiliary and control circuits with 2,0 kV and on motor and heating circuits with 1,2 kV.

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gez. Hornstein  
Quality assurance