

Control circuit cables			1 x 6
Pozidriv screwdriver		Size	2
Standard screwdriver		mm	0.8 x 5.5 1 x 6

### Main conducting paths

Rated impulse withstand voltage	$U_{imp}$	V AC	8000
Overvoltage category/pollution degree			III/3
Rated insulation voltage	$U_i$	V AC	690
Rated operational voltage	$U_e$	V AC	690
Safe isolation to EN 61140			
between coil and contacts		V AC	440
between the contacts		V AC	440
Making capacity (p.f. to IEC/EN 60947)			
	$U_p$ to 690 V	A	384
Breaking capacity			
220 V 230 V		A	320
380 V 400 V		A	320
500 V		A	320
660 V 690 V		A	180
Short-circuit rating			
Short-circuit protection maximum fuse			
Type "2" coordination			
400 V	gG/gL 500 V	A	63
690 V	gG/gL 690 V	A	35
Type "1" coordination			
400 V	gG/gL 500 V	A	125
690 V	gG/gL 690 V	A	63

### AC

AC-1			
Rated operational current			
Conventional free air thermal current, 3 pole, 50 - 60 Hz			
Open			
at 40 °C	$I_{th} = I_e$	A	45
at 50 °C	$I_{th} = I_e$	A	43
at 55 °C	$I_{th} = I_e$	A	42
at 60 °C	$I_{th} = I_e$	A	40
enclosed	$I_{th}$	A	36
Conventional free air thermal current, 1 pole			
open	$I_{th}$	A	100
enclosed	$I_{th}$	A	90
AC-3			
Rated operational current			
Open, 3-pole: 50 – 60 Hz			
220 V 230 V	$I_e$	A	32
240 V	$I_e$	A	32
380 V 400 V	$I_e$	A	32
415 V	$I_e$	A	32
440V	$I_e$	A	32
500 V	$I_e$	A	32
660 V 690 V	$I_e$	A	18
380 V 400 V	$I_e$	A	32
Motor rating	P	kWh	
220 V 230 V	P	kW	10
240V	P	kW	11

380 V 400 V	P	kW	15
415 V	P	kW	19
440 V	P	kW	20
500 V	P	kW	23
660 V 690 V	P	kW	17
<b>AC-4</b>			
Open, 3-pole: 50 – 60 Hz			
220 V 230 V	I <sub>e</sub>	A	15
240 V	I <sub>e</sub>	A	15
380 V 400 V	I <sub>e</sub>	A	15
415 V	I <sub>e</sub>	A	15
440 V	I <sub>e</sub>	A	15
500 V	I <sub>e</sub>	A	15
660 V 690 V	I <sub>e</sub>	A	12
<b>Motor rating</b>			
220 V 230 V	P	kWh	4
240 V	P	kWh	4.5
380 V 400 V	P	kWh	7
415 V	P	kWh	7.5
440 V	P	kWh	8
500 V	P	kWh	9
660 V 690 V	P	kWh	10

## DC

<b>Rated operational current, open</b>			
<b>DC-1</b>			
60 V	I <sub>e</sub>	A	40
110 V	I <sub>e</sub>	A	40
220 V	I <sub>e</sub>	A	40
440 V	I <sub>e</sub>	A	2.9
<b>DC-3</b>			
60 V	I <sub>e</sub>	A	40
110 V	I <sub>e</sub>	A	40
220 V	I <sub>e</sub>	A	25
440 V	I <sub>e</sub>	A	0.6
<b>DC-5</b>			
60 V	I <sub>e</sub>	A	40
110 V	I <sub>e</sub>	A	40
220 V	I <sub>e</sub>	A	10
440 V	I <sub>e</sub>	A	0.6

## Current heat loss

3-pole at I <sub>th</sub>	W	11.4
Current heat loss at I <sub>e</sub> to AC-3/400 V	W	6.6
Impedance per pole	mΩ	2.7

## Magnet systems

<b>Voltage tolerance</b>			
AC operated	Pick-up	x U <sub>c</sub>	0.8 - 1.1
Drop-out voltage AC operated	Drop-out	x U <sub>c</sub>	0.3 - 0.6
DC operated	Pick-up	x U <sub>c</sub>	0.7 - 1.2
DC operated	Drop-out	x U <sub>c</sub>	0.15 - 0.6
Notes	at least smoothed two-phase bridge rectifier or three-phase rectifier		
<b>Power consumption of the coil in a cold state and 1.0 x U<sub>c</sub></b>			
50 Hz	Pick-up	VA	52
50 Hz	Sealing	VA	7.1
50 Hz	Sealing	W	2.1