



Figure similar

Contactor AC-3 80/37kW 400V 48 VAC, 50 Hz 3-pole, Size S3 Screw terminal

General technical data	
size of contactor	S3
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state per pole	7.7 W
• without load current share typical	7.87 W
type of calculation of power loss current-dependent	quadratic
insulation voltage rated value	690 V
degree of pollution	3
surge voltage resistance rated value	6 kV
protection class IP	
• on the front	IP20
• of the terminal	IP00
shock resistance with sine pulse at AC	10.6 g / 5 ms, 6.2 g / 10 ms
Net Weight	1.838 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-10 ... +55 °C
• during storage	-25 ... +70 °C
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
number of NC contacts for main contacts	0
operating voltage	
• at AC-3 rated value maximum	690 V
• at AC-3e rated value maximum	690 V
operational current	
• at AC-1 up to 690 V at ambient temperature 40 °C rated value	100 A
• at AC-3	
— at 400 V rated value	80 A
— at 690 V rated value	47 A
• at AC-3e	
— at 400 V rated value	80 A
— at 690 V rated value	47 A
operating power	
• at AC-3	

— at 230 V rated value	22 kW
— at 400 V rated value	37 kW
— at 690 V rated value	45 kW
● at AC-3e	
— at 400 V rated value	37 kW
— at 690 V rated value	45 kW
operating frequency	
● at AC-3 maximum	800 1/h
● at AC-3e maximum	800 1/h
● at AC-4 maximum	250 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
● at 50 Hz rated value	42 V
operating range factor control supply voltage rated value of magnet coil at AC	
● at 50 Hz	0.8 ... 1.1
● at 60 Hz	0.85 ... 1.1
apparent pick-up power of magnet coil at AC	
● at 50 Hz	270 VA
● at 60 Hz	274 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.68
● at 60 Hz	0.62
apparent holding power of magnet coil at AC	
● at 50 Hz	22 VA
● at 60 Hz	27 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.27
● at 60 Hz	0.31
closing power of magnet coil at DC	0.61 W
holding power of magnet coil at DC	0.26 W
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	0
number of NO contacts for auxiliary contacts instantaneous contact	0
operational current at AC-15	
● at 230 V rated value	6 A
● at 400 V rated value	3 A
● at 690 V rated value	1 A
operational current at DC-13 at 220 V rated value	0.3 A
contact reliability of auxiliary contacts	acceptability for PLC control (17 V, 5 mA)
Short-circuit protection	
design of the fuse link	
● for short-circuit protection of the main circuit	
— with type of coordination 1 required	gL/gG NH 3NA: 200 A
● for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A
Installation/ mounting/ dimensions	
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
fastening method side-by-side mounting	Yes
fastening method	screw and snap-on mounting onto 35 mm and 75 mm DIN rail
height	148 mm
width	70 mm
depth	139 mm
required spacing with side-by-side mounting at the side	0 mm
Connections/ Terminals	
type of electrical connection	
● for main current circuit	screw-type terminals

<ul style="list-style-type: none"> • for auxiliary and control circuit 	screw-type terminals
type of connectable conductor cross-sections for main contacts	
<ul style="list-style-type: none"> • solid or stranded 	2x (2.5 ... 16 mm ²)
connectable conductor cross-section for main contacts finely stranded with core end processing	50 mm ²
connectable conductor cross-section for auxiliary contacts finely stranded with core end processing	0.5 ... 2.5 mm ²
type of connectable conductor cross-sections for auxiliary contacts	
<ul style="list-style-type: none"> • solid or stranded 	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
<ul style="list-style-type: none"> • finely stranded with core end processing 	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)

Safety related data

product function mirror contact according to IEC 60947-4-1	Yes
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front

Approvals Certificates

Environment	General Product Approval	EMV
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[Environmental Confirmations](#)



other

[Confirmation](#)



Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT7045-1AH00>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RT7045-1AH00>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

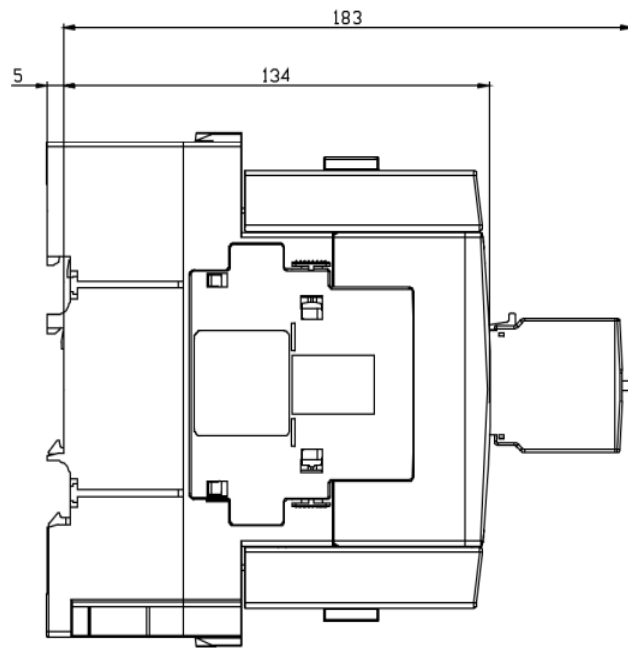
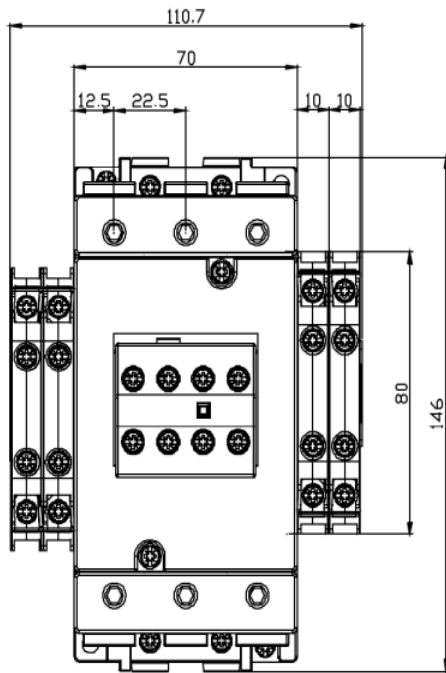
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Cax online generator

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Characteristic curves

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