

ESB24-22-230AC/DC



Products Low Voltage Products and Systems Control Products Contactors Installation Contactors

Products Low Voltage Products and Systems Modular DIN Rail Products Modular DIN Rail Components MDRCs Installation Contactors

General Information

Extended Product Type:	ESB24-22-230AC/DC
Product ID:	GHE3291302R0006
EAN:	4013614084614
Catalog Description:	ESB24-22-230AC/DC Installation Contactor
Long Description:	The ESB24 installation contactor is a 4 pole contactor suitable for modular switchboards. They are specially designed fitting to modular DIN rail products and for applications where customers want to use the panel design with high finger protection. Installation contactors are used in residential, commercial and industrial applications for the control of single or three-phase loads up to 24 A or switching of control signals. Further features are the noiseless and hum-free DC coil, the integrated overvoltage protection up to 5 kV and a switch position indication. Auxiliary contacts, distance pieces and sealing cover for protection against unauthorized changes are available as accessory.

Additional Information

Ambient Air Temperature:	Operation -25 ... +55 °C Storage -40 ... +80 °C
Ampere Rating UL/CSA:	7.6 A
BV Certificate:	1SAA920000-0204
Built-In Depth (t₂):	58 mm
CB Certificate:	1SAA920000-2003
CCC Certificate:	1SAA920000-3804
Coil Consumption:	Average Holding Value 50 Hz 4 V·A Average Pull-in Value 50 Hz 4 V·A
Coil Operating Limits:	(acc. to IEC 60947-4-1) 0.85 ... 1.1 x U _c (at θ ≤ 55 °C)
Connecting Capacity Control Circuit UL/CSA:	Stranded 16-10 AWG
Connecting Capacity Main Circuit UL/CSA:	Stranded 16-8 AWG
Connecting Capacity Control Circuit:	Rigid 1/2x 1 ... 4 mm ² Rigid 2x 2.5 mm ²
Connecting Capacity Main Circuit:	Flexible with Ferrule 1x 1.5 ... 10 mm ² Flexible with Insulated Ferrule 1x 1.5 ... 10 mm ² Flexible 1x 1.5 ... 10 mm ² Rigid 1x 1.5 ... 10 mm ² Rigid 2x 4 mm ²
Country of Origin:	Germany (DE)
Customs Tariff Number:	85365080
DNV Certificate:	1SAA920000-0305
Declaration of Conformity - CE:	1SAD938508-0007
Degree of Protection:	IP20
Drop-out Voltage in % of U_c:	10 ... 75
E-number:	3225044
EAC Certificate:	1SAA920000-2702
EAN:	4013614084614
EPLAN Catalog Tree:	Electrical engineering / Relays, contactors / Contactors
ETIM 4:	EC001653 - Installation contactor for distribution board
ETIM 5:	EC001653 - Installation contactor for distribution board
ETIM 6:	FC001653 - Installation contactor for distribution board

	ESB24-22-230AC/DC Inst.-contact. 2NC+2NO 220-240V
Electrical Durability:	AC-1 150000 cycle AC-3 500000 cycle AC-7a 150000 cycle AC-7b 500000 cycle
Environmental Information:	1SAA920002-2401
Frequency (f):	40 ... 450 Hz
Full Load Amps Motor Use:	(220 ... 240 V AC) Single Phase 9.6 A (440 ... 480 V AC) Three Phase 7.6 A
Fuse Type:	Class K5 - 25 A
GL Certificate:	1SAA920000-0403
GOST Certificate:	1SAA920000-2701
General Use Rating UL/CSA:	(acc. to UL 240 V) 24 A (acc. to UL 480 V) 24 A
Horsepower Rating UL/CSA:	(220 ... 240 V AC) Single Phase 3 Hp (440 ... 480 V AC) Three Phase 5 Hp
IT Publishing Status:	Level 0 - Information enabled
Industrial IT Certification Level:	0
Instructions and Manuals:	2CDC103025M6801
Invoice Description:	ESB24-22-230AC/DC Inst.-contact. 2NC+2NO 220-240V
Maximum Electrical Switching Frequency:	AC-1 300 cycles per hour AC-3 600 cycles per hour AC-7a 300 cycles per hour AC-7b 600 cycles per hour
Maximum Electrical Switching Frequency UL/CSA:	General Use 300 cycles per hour Motor Use 600 cycles per hour
Maximum Operating Altitude Permissible:	2000 m
Maximum Operating Voltage UL/CSA:	Main Circuit 480 V AC
Mechanical Durability:	1000000 cycle
Minimum Order Quantity:	1 piece
Mounting Position:	Position 1 to 5
Mounting on DIN Rail:	TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715 TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715
Number of Auxiliary Contacts NC:	0
Number of Auxiliary Contacts NO:	0
Number of Main Contacts NC:	2
Number of Main Contacts NO:	2
Number of Poles:	4
Object Classification Code:	Q
Package Level 1 EAN:	4013614420634
Package Level 1 Gross Weight:	1.22 kg
Package Level 1 Height:	69 mm
Package Level 1 Length:	183 mm
Package Level 1 Units:	5 piece
Package Level 1 Width:	89 mm
Pollution Degree:	3
Power Loss:	at Rated Operating Conditions per Pole 3 W
Product Main Type:	ESB24
Product Name:	Installation Contactor
Product Net Depth:	65 mm
Product Net Height:	85 mm
Product Net Weight:	0.235 kg

Product Net Width:	36 mm
RMRS Certificate:	1SAA920000-0703
Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1:	8 x I _e / AC-3
Rated Control Circuit Voltage (U_c):	230 ... 240 V
Rated Frequency (f):	Control Circuit DC Control Circuit 50 Hz Control Circuit 60 Hz Control Circuit 400 Hz Main Circuit DC Main Circuit 50 Hz Main Circuit 60 Hz
Rated Impulse Withstand Voltage (U_{imp}):	6 kV
Rated Insulation Voltage (U_i):	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 500 V
Rated Making Capacity AC-3 acc. to IEC 60947-4-1:	10 x I _e / AC-3
Rated Operational Current AC-1 (I_e):	(NC) 24 A (NO) 24 A
Rated Operational Current AC-3 (I_e):	(230 V) Single Phase 9 A (400 V) Three Phase 9 A
Rated Operational Current AC-7a (I_e):	(NC) 24 A (NO) 24 A
Rated Operational Current AC-7b (I_e):	(230 V) Single Phase 9 A (400 V) Three Phase 9 A
Rated Operational Power AC-1 (P_e):	230 V Single Phase 5.5 kW 400 V Three Phase 16 kW
Rated Operational Power AC-3 (P_e):	(230 V) Single Phase 1.3 kW (400 V) Three Phase 4 kW
Rated Operational Power AC-7a (P_e):	(230 V) Single Phase 5.5 kW (400 V) Three Phase 16 kW
Rated Operational Power AC-7b (P_e):	(230 V) Single Phase 1.3 kW (400 V) Three Phase 4 kW
Rated Operational Voltage:	Main Circuit 220 V DC Main Circuit 400 V AC
Rated Short-time Withstand Current (I_{cw}):	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 72 kA
Recommended Screw Driver:	Control Circuit Pozidriv 1 Main Circuit Pozidriv 1
Remarks:	Installation contactor, noiseless/humfree, high insulation, reliable function, long life
Resistance to Shock acc. to IEC 60068-2-27:	11 ms Pulse 15g
Resistance to Vibrations acc. to IEC 60068-2-6:	5g / 3 ... 150 Hz
RoHS Date:	0456
RoHS Information:	1SAA920005-4401
RoHS Status:	Following EU Directive 2002/95/EC August 18, 2005 and amendment
Selling Unit of Measure:	piece
Short Description:	ESB24-22-230AC/DC Inst.-contact. 2NC+2NO
Short-Circuit Protective Devices:	gG Type Fuses 35 A
Standards:	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 IEC/EN 61095 UL 60947-1 UL 60947-4-1
Terminal Type:	Screw Terminals

Tightening Torque:	Control Circuit 0.9 N·m Main Circuit 1 N·m
Tightening Torque UL/CSA:	Control Circuit 8 in·lb Main Circuit 9 in·lb
Utilization Category:	AC-1 AC-3 AC-7a AC-7b
Width in Number of Modular Spacings:	2
Wire Stripping Length:	Control Circuit 7 mm Main Circuit 10 mm
cUL Certificate:	cUL E191658
eClass:	7.0 27142308