



**Electric Automation**  
Automation specialists

Reference: ESB24-22/230V  
Code: GHE3291302R0006

ESB24-22-230AC/DC Installation Contactor

Buy it at Electric Automation Network



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.

### Ordering

EAN:	4013614084614
Minimum Order Quantity:	1 piece
Customs Tariff Number:	85365080

### Dimensions

Product Net Width:	36 mm
Product Net Height:	85 mm
Product Net Depth:	65 mm
Product Net Weight:	0.235 kg

### Container Information

Package Level 1 Units:	5 piece
Package Level 1 Width:	89 mm
Package Level 1 Height:	69 mm
Package Level 1 Length:	183 mm
Package Level 1 Gross Weight:	1.22 kg
Package Level 1 EAN:	4013614420634

## Environmental

Ambient Air Temperature:	Operation -25 ... +55 °C Storage -40 ... +80 °C
Maximum Operating Altitude Permissible:	2000 m
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 Status:	Following EU Directive 2002/95/EC August 18, 2005 and amendment

## Technical UL/CSA

Maximum Operating Voltage UL/CSA:	Main Circuit 480 V AC
Ampere Rating UL/CSA:	7.6 A
Horsepower Rating UL/CSA:	(220 ... 240 V AC) Single Phase 3 Hp (440 ... 480 V AC) Three Phase 5 Hp
General Use Rating UL/CSA:	(acc. to UL 240 V) 24 A (acc. to UL 480 V) 24 A
Connecting Capacity Main Circuit UL/CSA:	Stranded 16 ... 8 AWG
Tightening Torque UL/CSA:	Control Circuit 8 in·lb Main Circuit 9 in·lb
Connecting Capacity Control Circuit UL/CSA:	Stranded 16 ... 10 AWG

## Additional Information

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 <sub>c</sub> (at $\theta \leq 55$ °C)
Connecting Capacity-Control Circuit:	Rigid 1/2x 1 ... 4 mm <sup>2</sup> Rigid 2x 2.5 mm <sup>2</sup>
Connecting Capacity-Main Circuit:	Flexible with Ferrule 1x 1.5 ... 10 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 1.5 ... 10 mm <sup>2</sup> Flexible 1x 1.5 ... 10 mm <sup>2</sup> Rigid 1x 1.5 ... 10 mm <sup>2</sup> Rigid 2x 4 mm <sup>2</sup>
Degree of Protection:	IP20
Drop-out Voltage in % of U <sub>c</sub> :	10 ... 75

Electrical Durability:	AC-1 150000 cycle AC-3 500000 cycle AC-7a 150000 cycle AC-7b 500000 cycle
Frequency (f):	40 ... 450 Hz
Fuse Type:	Class K5 - 25 A
IIT Publishing Status:	Level 0 - Information enabled
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
Mechanical Durability:	1000000 cycle
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
Mounting Position:	Position 1 to 5
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
Pollution Degree:	3
Power Loss:	at Rated Operating Conditions per Pole 3 W
Product Main Type:	ESB24
Product Name:	Installation Contactor
Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1:	8 x I <sub>e</sub> / AC-3
Rated Control Circuit Voltage (U <sub>c</sub> ):	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 <sub>imp</sub> ):	6 kV
Rated Insulation Voltage (U <sub>i</sub> ):	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 500 V acc. to UL/CSA 600 V
Rated Making Capacity AC-3 acc. to IEC 60947-4-1:	10 x I <sub>e</sub> / AC-3
Rated Operational Current AC-1 (I <sub>e</sub> ):	(NC) 24 A (NO) 24 A
Rated Operational Current AC-3 (I <sub>e</sub> ):	(230 V) Single Phase 9 A (400 V) Three Phase 9 A
Rated Operational Current AC-7b (I <sub>e</sub> ):	(230 V) Single Phase 9 A (400 V) Three Phase 9 A
Rated Operational Power AC-1 (P <sub>e</sub> ):	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 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
RoHS Date:	0456
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
Wire Stripping Length:	Control Circuit 7 mm Main Circuit 10 mm

## Certificates and Declarations (Document Number)

BV Certificate:	1SAA920000-0203
CB Certificate:	1SAA920000-2003
CCC Certificate:	1SAA920000-3804
cUL Certificate:	1SAA920000-1701
Data Sheet, Technical Information:	1SAC101101D0201
Declaration of Conformity - CE:	1SAD938508-0007
DNV Certificate:	1SAA920000-0305
EAC Certificate:	1SAA920000-2702
GL Certificate:	1SAA920000-0403
GOST Certificate:	1SAA920000-2701
NF Certificate:	1SAA920000-1201
RMRS Certificate:	1SAA920000-0703
RoHS Information:	1SAA920005-4401
UL Certificate:	1SAA920000-1603

## Classifications

eClass:	7.0 27142308
---------	--------------

E-nummer:	3225044
ETIM 4:	EC001653 - Installation contactor for distribution board
ETIM 5:	EC001653 - Installation contactor for distribution board
Object Classification Code:	Q