

## PRODUCT-DETAILS

# ESB24-20-230AC/DC

## ESB24-20-230AC/DC Installation Contactor



### General Information

Extended Product Type	ESB24-20-230AC/DC
Product ID	GHE3291402R0006
EAN	4013614146756
Catalog Description	ESB24-20-230AC/DC Installation Contactor

### Long Description

The ESB24 installation contactor is a 2 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

Package Level 1 EAN	4013614420696
Minimum Order Quantity	1 piece
Customs Tariff Number	85365080

### Popular Downloads

Data Sheet, Technical	2CDC103023C0201
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## Information

## Instructions and Manuals

2CDC103025M6801

## Dimensions

Product Net Width	36 mm
Product Net Height	85 mm
Product Net Depth / Length	65 mm
Product Net Weight	0.225 kg

## Technical

Rated Operational Voltage	Main Circuit 220 V DC Main Circuit 400 V AC
Rated Control Circuit Voltage ( $U_c$ )	230 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 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
Rated Operational Power AC-1 ( $P_e$ )	(230 V) Single Phase 5.5 kW (400 V) Single Phase 16 kW
Rated Operational Power AC-3 ( $P_e$ )	(230 V) Single Phase 1.3 kW
Rated Operational Current AC-7a ( $I_e$ )	(NC) 24 A (NO) 24 A
Rated Operational Power AC-7a ( $P_e$ )	(230 V) Single Phase 5.5 kW
Rated Operational Current AC-7b ( $I_e$ )	(230 V) Single Phase 9 A
Rated Operational Power AC-7b ( $P_e$ )	(230 V) Single Phase 1.3 kW
Recommended Screw Driver	Control Circuit Pozidriv 1 Main Circuit Pozidriv 1
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
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>
Connecting Capacity Control Circuit	Flexible with Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Ferrule 2x 0.75 ... 1 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 1 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup>

	Flexible 1x 1 ... 4.0 mm <sup>2</sup> Flexible 2x 1 ... 2.5 mm <sup>2</sup> Rigid 1/2x 1 ... 4 mm <sup>2</sup> Rigid 2x 2.5 mm <sup>2</sup>
Tightening Torque	Control Circuit 0.9 N·m Main Circuit 1 N·m
Wire Stripping Length	Control Circuit 7 mm Main Circuit 10 mm
Degree of Protection	IP20
Electrical Durability	AC-1 150000 cycle AC-3 500000 cycle AC-7a 150000 cycle AC-7b 500000 cycle
Mechanical Durability	1000000 cycle
Number of Poles	2
Number of Main Contacts NC	0
Number of Main Contacts NO	2
Width in Number of Modular Spacings	2
Pollution Degree	3
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

## Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 480 V AC
Horsepower Rating UL/CSA	(220 ... 240 V AC) Single Phase 3 Hp (440 ... 480 V AC) Three Phase 5 Hp
Connecting Capacity Main Circuit UL/CSA	Stranded 16-8 AWG
Connecting Capacity Control Circuit UL/CSA	Stranded 16-10 AWG
Tightening Torque UL/CSA	Control Circuit 8 in·lb Main Circuit 9 in·lb

## 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 2011/65/EU

## Certificates and Declarations (Document Number)

BV Certificate	1SAA920000-0204
CB Certificate	1SAA920000-2003
CCC Certificate	1SAA920000-3805
cULus Certificate	cUL_E191658
Declaration of Conformity - CE	1SAD938513-0007
DNV Certificate	1SAA920000-0306
EAC Certificate	1SAA920000-2702
Instructions and Manuals	2CDC103025M6801
KC Certificate	1SAA920001-1501
RMRS Certificate	1SAA920000-0705
RoHS Information	1SAD938512-0007

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## Container Information

Package Level 1 Units	5 piece
Package Level 1 Width	89 mm
Package Level 1 Height	69 mm
Package Level 1 Depth / Length	183 mm
Package Level 1 Gross Weight	1.17 kg
Package Level 1 EAN	4013614420696

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## Classifications

Object Classification Code	Q
ETIM 4	EC001653 - Installation contactor for distribution board
ETIM 5	EC001653 - Installation contactor for distribution board
ETIM 6	EC001653 - Installation contactor for distribution board
ETIM 7	EC001653 - Installation contactor for distribution board
eClass	7.0 27142308
UNSPSC	39121529

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## Categories

Low Voltage Products and Systems → Control Products → Contactors → Installation Contactors

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

