DATASHEET - SDAINLM22(24VDC)

Star-delta contactor combination, 380 V 400 V: 11 kW, 24 V DC, DC operation



Part no.

SDAINLM22(24VDC) 100418

| General specifications | |
|---|---|
| Product name | Eaton Moeller® series SDAINL contactor combination |
| Part no. | SDAINLM22(24VDC) |
| EAN | 4015081003952 |
| Product Length/Depth | 117 millimetre |
| Product height | 82 millimetre |
| Product width | 158 millimetre |
| Product weight | 1.19 kilogram |
| Compliances | Contact Manufacturer |
| Certifications | CE |
| Product Tradename | SDAINL |
| Product Type | Contactor combination |
| Product Sub Type | None |
| Catalog Notes | Contacts according to EN 50012 |
| Features & Functions | |
| Functions | Star-delta contactor |
| General information | |
| Application | Star-delta motor starting for contactor combinations |
| Degree of protection | IP20 NEMA Other |
| Product category | Contactor combinations |
| Suitable for | Also motors with efficiency class IE3 |
| Used with | ETR4-51 |
| Utilization category | AC-3: Normal AC induction motors: starting, switch off during running |
| Voltage type | DC |
| Climatic environmental conditions | |
| Ambient operating temperature - min | -25 °C |
| Ambient operating temperature - max | 60 °C |
| Electrical rating | |
| Rated operational current (Ie) at AC-1, 380 V, 400 V, 415 V | 22 A |
| Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V | 22 A |
| Rated operational power at AC-3, 380/400 V, 50 Hz | 11 kW |
| Rated operational power at AC-3, 500 V, 50 Hz | 11 kW |
| Rated operational power at AC-3, 690 V, 50 Hz | 11 kW |
| Magnet system | |
| Changeover time | 20 s, max. |
| Duty factor | 100 % |
| Rated control supply voltage (Us) at AC, 50 Hz - min | 0 V |
| Rated control supply voltage (Us) at AC, 50 Hz - max | |
| Rated control supply voltage (Us) at AC, 60 Hz - min | |
| Rated control supply voltage (Us) at AC, 60 Hz - max | |
| Rated control supply voltage (Us) at AC, of H2 - max | 24 V |
| Rated control supply voltage (Us) at DC - max | 24 V 24 V |
| | |
| Contacts | |
| Number of auxiliary contacts (normally closed contacts) | 0 |
| Number of auxiliary contacts (normally open contacts) | 3 |

| Equipment heat dissipation, current-dependent Pvid | 6.11 W |
|--|--|
| Heat dissipation capacity Pdiss | 0 W |
| Heat dissipation per pole, current-dependent Pvid | 2.04 W |
| Rated operational current for specified heat dissipation (In) | 12.76 A |
| Static heat dissipation, non-current-dependent Pvs | 10.8 W |
| 10.2.2 Corrosion resistance | Meets the product standard's requirements. |
| 10.2.3.1 Verification of thermal stability of enclosures | Meets the product standard's requirements. |
| 10.2.3.2 Verification of resistance of insulating materials to normal heat | Meets the product standard's requirements. |
| 10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects | Meets the product standard's requirements. |
| 10.2.4 Resistance to ultra-violet (UV) radiation | Meets the product standard's requirements. |
| 10.2.5 Lifting | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.2.6 Mechanical impact | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.2.7 Inscriptions | Meets the product standard's requirements. |
| 10.3 Degree of protection of assemblies | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.4 Clearances and creepage distances | Meets the product standard's requirements. |
| 10.5 Protection against electric shock | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.6 Incorporation of switching devices and components | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.7 Internal electrical circuits and connections | Is the panel builder's responsibility. |
| 10.8 Connections for external conductors | Is the panel builder's responsibility. |
| 10.9.2 Power-frequency electric strength | Is the panel builder's responsibility. |
| 10.9.3 Impulse withstand voltage | Is the panel builder's responsibility. |
| 10.9.4 Testing of enclosures made of insulating material | Is the panel builder's responsibility. |
| 10.10 Temperature rise | The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices. |
| 10.11 Short-circuit rating | Is the panel builder's responsibility. The specifications for the switchgear must be observed. |
| 10.12 Electromagnetic compatibility | Is the panel builder's responsibility. The specifications for the switchgear must be observed. |
| 10.13 Mechanical function | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed. |

Technical data ETIM 9.0

Low-voltage industrial components (EG000017) / Combination of contactors (EC000010)

| Function Star-delta contactor Rail mounting possible No Rated control supply voltage AC 50 Hz 0 Rated control supply voltage AC 60 Hz V Rated control supply voltage AC 60 Hz V Rated control supply voltage AC 60 Hz V Number of normally closed contacts as main contact V Number of normally closed contacts as main contact V Voltage type for actuating V Number of normally closed contacts as main contact V Operating voltage AC 60 Hz V Number of normally closed contacts as main contact V Operating voltage AC 60 Hz V Operating voltage AC 60 Hz V Operating voltage AC 60 Hz V Operating voltage DC V Rated operation current le at AC-1,400 V A Rated operation power at AC-3,400 V A Rated operation power AEA3,400 V V Rated operation power NEMA MW Number of auxiliary contacts as normally closed contact MW Number of auxiliary contacts as change-over contact M | Electric angineering outemption process control angineering (Low welface quite | h taabaalaa / C | onto oto - | (1)/) / Combination of contractor (col@co12.27.27.10.00 [AG7E72010]) | | | |
|--|--|-----------------|------------|--|--|--|--|
| Rai mounting possible Read Read Raid mounting possible V 0 Rated control supply voltage AC 50 Hz V 0 Rated control supply voltage AC 60 Hz V 0 Rated control supply voltage AC 60 Hz V 0 Number of normally closed contacts as main contact V 0 Number of normally closed contacts as main contact V 0 Ype of electrical connection of main circuit V 0 Voltage type (operating voltage AC 60 Hz C Serve connection Number of normally closed contacts as main contact V 0 Vige type (operating voltage AC 60 Hz C C Operating voltage AC 60 Hz V 0 Operating voltage AC 60 Hz V 0 Operating voltage AC 60 Hz V 0 Rated operation current let at AC-1, 400 V Z 2 Rated operation current let at AC-3, 400 V KW 1 Rated operating power ALAC-3, 400 V KW 0 Number of auxiliary contacts as normally closed contact KW 0 | Electric engineering, automation, process control engineering / Low-voltage switch technology / Contactor (LV) / Combination of contactor (ecl@ss13-27-37-10-09 [AGZ572019]) | | | | | | |
| Rated control supply voltage AC 50 Hz 0 Rated control supply voltage AC 60 Hz V 0 Rated control supply voltage DC V 4-24 Voltage type for actuating C 0 Number of normally closed contacts as main contact M 0 Voltage type (operating voltage AC 50 Hz C 0 Number of normally closed contacts as main contact M 0 Voltage type (operating voltage AC 50 Hz C C Operating voltage AC 50 Hz V 0 Operating voltage AC 60 Hz V 4 6 Operating voltage AC 60 Hz V 0 0 0 Rated operation current le at AC-1, 400 V M 2 2 0 0 0 Rated operation power ALC-3, 400 V M A 2 2 0 | | | | Star-delta contactor | | | |
| Rated control supply voltage AC 60 Hz No Rated control supply voltage DC V 2 Voltage type for actuating C Number of normally closed contacts as main contact M M Number of normally closed contacts as main contact M M Voltage type (operating voltage DC M M Value type (operating voltage AC 60 Hz M M Voltage type (operating voltage AC 60 Hz M M Operating voltage AC 60 Hz M M Rated operation current le at AC-1, 400 V M M Rated operation power AC-3, 400 V M M Rated operation power NEMA M M Number of auxiliary contacts as normally closed contact M M Number of auxiliary contacts as change-over contact M M | Rail mounting possible | | | No | | | |
| Rated control supply voltage DC V 24 - 24 Voltage type for actuating DC Number of normally closed contacts as main contact P 9 Number of normally open contacts as main contact Screw connection Voltage type (operating voltage) C C Operating voltage AC 50 Hz C C Operating voltage DC C V 24 - 690 Rated operation current le at AC-1, 400 V C 2 60 Rated operation power AC-3, 400 V C 2 2 Number of auxiliary contacts as normally closed contact KW 1 1 Number of auxiliary contacts as normally closed contact KW 2 2 2 Number of auxiliary contacts as normally closed contact KW 1 2 <td>Rated control supply voltage AC 50 Hz</td> <td></td> <td>V</td> <td>0 - 0</td> | Rated control supply voltage AC 50 Hz | | V | 0 - 0 | | | |
| Voltage type for actuating C C Number of normally closed contacts as main contact 0 0 Number of normally open contacts as main contact 6 0 Ype of electrical connection of main circuit Serve connection Serve connection Voltage type (operating voltage) V 4 60 Operating voltage AC 50 Hz V 2 4 60 Operating voltage AC 60 Hz V 2 4 60 1 0 < | Rated control supply voltage AC 60 Hz | | V | 0 - 0 | | | |
| Number of normally closed contacts as main contact Image: Provide the second seco | Rated control supply voltage DC | | V | 24 - 24 | | | |
| Number of normally open contacts as main contact Performation Perform | Voltage type for actuating | | | DC | | | |
| Type of electrical connection of main circuit Mathematical stream of main circuit <th< td=""><td>Number of normally closed contacts as main contact</td><td></td><td></td><td>0</td></th<> | Number of normally closed contacts as main contact | | | 0 | | | |
| Notage type (operating voltage) AC Operating voltage AC 50 Hz 4 690 Operating voltage AC 60 Hz 4 690 Operating voltage DC Voltage type (operation current le at AC-1, 400 V 4 60 Rated operation current le at AC-3, 400 V Machine 2 Rated operation power at AC-3, 400 V Machine 2 Number of auxiliary contacts as normally closed contact KW 0 Number of auxiliary contacts as normally open contact Machine 2 Yue of electrical connection for auxiliary- and control current circuit Machine 2 Dypered protection (IP) Machine 2 3 | Number of normally open contacts as main contact | | | 9 | | | |
| Operating voltage AC 50 Hz V 24-690 Operating voltage AC 60 Hz V 24-690 Operating voltage AC 60 Hz V 24-690 Operating voltage DC V 0 Rated operation current le at AC-1, 400 V A 20 Rated operation current le at AC-3, 400 V A 20 Rated operation power at AC-3, 400 V KW 10 Number of auxiliary contacts as normally closed contact KW 0 Number of auxiliary contacts as normally closed contact S 0 Number of auxiliary contacts as normally contact S 0 Type of electrical connection for auxiliary- and control current circuit Serw connection Degree of protection (IP) W P20 | Type of electrical connection of main circuit | | | Screw connection | | | |
| Operating voltage AC 60 Hz V 24 - 690 Operating voltage DC V 0 - 0 Rated operation current le at AC-1, 400 V A 22 Rated operation current le at AC-3, 400 V A 2 Rated operation power AC-3, 400 V KW 1 Rated operation power NEMA KW 0 Number of auxiliary contacts as normally closed contact KW 0 Number of auxiliary contacts as change-over contact M 3 Type of electrical connection (IP) KM Cerew connection | Voltage type (operating voltage) | | | AC | | | |
| Diperation current Leat AC-1, 400 V V 0-0 Rated operation current Leat AC-1, 400 V A 2 Rated operation current Leat AC-3, 400 V A 2 Rated operation power at AC-3, 400 V KW 1 Rated operation power ALC-3, 400 V KW 0 Rated operation power NEMA KW 0 Number of auxiliary contacts as normally closed contact KW 0 Number of auxiliary contacts as normally copen contact M 0 Type of electrical connection for auxiliary- and control current circuit KW 0 Pergee of protection (IP) KW 0 0 | Operating voltage AC 50 Hz | | V | 24 - 690 | | | |
| Rated operation current le at AC-1, 400 V A 2 Rated operation current le at AC-3, 400 V A 2 Rated operation power at AC-3, 400 V KW 1 Rated operation power at AC-3, 400 V KW 0 Rated operation power NEMA KW 0 Number of auxiliary contacts as normally closed contact M 0 Number of auxiliary contacts as normally open contact M 0 Type of electrical connection for auxiliary- and control current circuit Serve connection Serve connection Pagree of protection (IP) Image: Serve connection contact Image: Serve connection contact Serve connection | Operating voltage AC 60 Hz | | V | 24 - 690 | | | |
| Rated operation current le at AC-3, 400 V A 2 Rated operation power at AC-3, 400 V KW 1 Rated operation power NEMA KW 0 Number of auxiliary contacts as normally closed contact KW 0 Number of auxiliary contacts as normally open contact F 0 Number of auxiliary contacts as normally open contact F 0 Number of auxiliary contacts as normally open contact F 0 Number of auxiliary contacts as normally open contact F 0 Number of auxiliary contacts as normally open contact F 0 Number of auxiliary contacts as normally open contact F 0 Type of electrical connection for auxiliary- and control current circuit F 0 Degree of protection (IP) Image: S S S | Operating voltage DC | | V | 0 - 0 | | | |
| Rated operation power at AC-3, 400 V kW 1 Rated operation power NEMA kW 0 Number of auxiliary contacts as normally closed contact kW 0 Number of auxiliary contacts as normally open contact 0 0 Number of auxiliary contacts as normally open contact 6 0 Type of electrical connection for auxiliary- and control current circuit 6 Screw connection Degree of protection (IP) image: bit imag | Rated operation current le at AC-1, 400 V | | Α | 22 | | | |
| Rated operation power NEMA KW 0 Number of auxiliary contacts as normally closed contact Image: Contact contact contact contact Image: Contact | Rated operation current le at AC-3, 400 V | | Α | 22 | | | |
| Number of auxiliary contacts as normally closed contact Image: Contact is a normally closed contact Image: Contact is a normally closed contact Number of auxiliary contacts as normally open contact Image: Contact is a normally closed contact Image: Contact is a normally closed contact Number of auxiliary contacts as normally open contact Image: Contact is a normally closed contact Image: Contact is a normally closed contact Number of auxiliary contacts as change-over contact Image: Contact is a normally closed contact Image: Contact is a normally closed contact Type of electrical connection for auxiliary- and control current circuit Image: Contact is a normally closed contact Image: Contact is a normally closed contact Degree of protection (IP) Image: Contact is a normal norma | Rated operation power at AC-3, 400 V | | kW | 11 | | | |
| Number of auxiliary contacts as normally open contact 3 Number of auxiliary contacts as change-over contact 0 Type of electrical connection for auxiliary- and control current circuit Screw connection Degree of protection (IP) Image: Contact cont | Rated operation power NEMA | | kW | 0 | | | |
| Number of auxiliary contacts as change-over contact Image: Contact set and control current circuit Image: Contact set and control current circuit Type of electrical connection for auxiliary- and control current circuit Image: Contact set and control current circuit Image: Contact set and control current circuit Degree of protection (IP) Image: Contact set and control current circuit Image: Contact set and contact set an | Number of auxiliary contacts as normally closed contact | | | 0 | | | |
| Type of electrical connection for auxiliary- and control current circuit Screw connection Degree of protection (IP) IP20 | Number of auxiliary contacts as normally open contact | | | 3 | | | |
| Degree of protection (IP) | Number of auxiliary contacts as change-over contact | | | 0 | | | |
| | Type of electrical connection for auxiliary- and control current circuit | | | Screw connection | | | |
| Degree of protection (NEMA) Other | Degree of protection (IP) | | | IP20 | | | |
| | Degree of protection (NEMA) | | | Other | | | |

| Width | mm | 158 |
|--------|----|-----|
| Height | mm | 82 |
| Depth | mm | 117 |