DATASHEET - DILEM-01(42V50/60HZ)



Contactor, 42 V 50/60 Hz, 3 pole, 380 V 400 V, 4 kW, Contacts N/C = Normally closed= 1 NC, Screw terminals, AC operation



Part no. DILEM-01(42V50/60HZ)

Catalog No. 033233

Alternate Catalog XTMC9A01AB

No

| De | livery | program |
|----|--------|---------|
| | | 9-1-1 |

| Delivery program | | | |
|---|----------------|----|---|
| Product range | | | Contactors |
| Application | | | Mini Contactors for Motors and Resistive Loads |
| Subrange | | | DILEM contactors |
| Utilization category | | | AC-1: Non-inductive or slightly inductive loads, resistance furnaces AC-3/AC-3e: Normal AC induction motors: Starting, switching off while running AC-4: Normal AC induction motors: starting, plugging, reversing, inching |
| | | | IE3 🗸 |
| Notes | | | Also suitable for motors with efficiency class IE3. IE3-ready devices are identified by the logo on their packaging. Also tested according to AC-3e. |
| Connection technique | | | Screw terminals |
| Description | | | With auxiliary contact |
| Number of poles | | | 3 pole |
| Rated operational current | | | |
| AC-3 | | | |
| 380 V 400 V | I _e | Α | 9 |
| AC-1 | | | |
| Conventional free air thermal current, 3 pole, 50 - 60 Hz | | | |
| Open | | | |
| at 40 °C | $I_{th} = I_e$ | Α | 22 |
| Max. rating for three-phase motors, 50 - 60 Hz | | | |
| AC-3 | | | |
| 220 V 230 V | P | kW | 2.2 |
| 380 V 400 V | P | kW | 4 |
| 660 V 690 V | P | kW | 4 |
| AC-4 | | | |
| 220 V 230 V | P | kW | 1.5 |
| 380 V 400 V | P | kW | 3 |
| 660 V 690 V | P | kW | 3 |
| Contacts | | | |
| N/C = Normally closed | | | 1 NC |
| Contact sequence | | | A1 1 3 5 21 A2 2 4 6 22 |
| For use with | | | DILE |
| Actuating voltage | | | 42 V 50/60 Hz |
| Voltage AC/DC | | | AC operation |

Technical data

General

| delicitat | | | |
|-------------------------------------|------------|-------------------|---------------------------------|
| Standards | | | IEC/EN 60947, VDE 0660, CSA, UL |
| Lifespan, mechanical; Coil 50/60 Hz | Operations | x 10 ⁶ | 7 |
| Lifespan, mechanical | Operations | x 10 ⁶ | 10 |
| Maximum operating frequency | | | |

| Mechanical | | Ops./h | 9000 |
|---|------------------|-----------------|---|
| electrical (Contactors without overload relay) | Operations/h | υμδ./11 | Page 05/070 |
| Climatic proofing | Operations/ii | | Damp heat, constant, to IEC 60068-2-78 |
| omitate proofing | | | Damp heat, cyclic, to IEC 60068-2-30 |
| Ambient temperature | | | |
| Open | | °C | -25 - +50 |
| Enclosed | | °C | - 25 - 40 |
| Storage | | °C | |
| Min. ambient temperature, storage | | °C | - 40 |
| Ambient temperature, storage max. | | °C | + 80 |
| Mounting position | | | As required, except vertical with terminals A1/A2 at the bottom |
| Mounting position | | | |
| Mechanical shock resistance (IEC/EN 60068-2-27) | | | |
| Half-sinusoidal shock, 10 ms | | | |
| Basic unit without auxiliary contact module | | | |
| Main contacts, make contacts | | g | 10 |
| Main contacts Make/break contacts | | g | |
| Break contact | | g | 10 |
| Basic unit with auxiliary contact module | | | |
| Main contacts make contact | | g | |
| Make | | g | 10 |
| Auxiliary contacts Make/break contacts | | g | 20 / 20 |
| Degree of Protection | | | IP20 |
| Protection against direct contact when actuated from front (EN 50274) | | | Finger and back-of-hand proof |
| Altitude | | m | Max. 2000 |
| Weight | | kg | 0.17 |
| Terminal capacity of auxiliary and main contacts | | | |
| Screw terminals | | | |
| Solid | | mm ² | 1 x (0.75 - 2.5) 2 x (0.75 - 2.5) |
| Flexible with ferrule | | mm ² | 1 x (0.75 - 1.5) 2 x (0.75 - 1.5) |
| Solid or stranded | | AWG | 18 - 14 |
| Stripping length | | mm | 8 |
| Terminal screw | | | M3.5 |
| Pozidriv screwdriver | | Size | 2 |
| Standard screwdriver | | mm | 0.8 x 5.5 1 x 6 |
| Max. tightening torque | | Nm | 1.2 |
| Main conducting paths | | | |
| Rated impulse withstand voltage | U _{imp} | V AC | 6000 |
| Overvoltage category/pollution degree | | | 111/3 |
| Rated insulation voltage | Ui | V AC | 690 |
| Rated operational voltage | U _e | V AC | 690 |
| Safe isolation to EN 61140 | | | |
| between coil and contacts | | V AC | 300 |
| between the contacts | | V AC | 300 |
| Making capacity (cos φ to IEC/EN 60947) | | Α | 110 |

| Breaking capacity | | | |
|---|-----------------|-----|--|
| 220 V 230 V | | Α | 90 |
| 380 V 400 V | | Α | 90 |
| 500 V | | Α | 64 |
| 660 V 690 V | | Α | 42 |
| Short-circuit protection maximum fuse | | | |
| Type "2", 500 V | gL/gG | Α | 10 |
| Type "1", 500 V | gL/gG | Α | 20 |
| AC | | | |
| AC-1 | | | |
| Rated operational current | | | |
| Conventional free air thermal current, 3 pole, 50 - 60 Hz | | | |
| Open | | | |
| at 40 °C | $I_{th} = I_e$ | Α | 22 |
| at 50 °C | $I_{th} = I_e$ | Α | 20 |
| at 55 °C | $I_{th} = I_e$ | Α | 19 |
| enclosed | I _{th} | Α | 16 |
| Notes | | | At maximum permissible ambient air temperature. |
| Conventional free air thermal current, 1 pole | | | |
| Notes | | | At maximum permissible ambient air temperature. |
| open | I _{th} | Α | 50 |
| enclosed | I _{th} | A | 40 |
| AC-3 | u. | | |
| Rated operational current | | | |
| Open, 3-pole: 50 – 60 Hz | | | |
| Notes | | | At maximum permissible ambient temperature (open.) Also tested according to AC-3e. |
| 220 V 230 V | I _e | Α | 9 |
| 240 V | I _e | Α | 9 |
| 380 V 400 V | I _e | A | 9 |
| 415 V | I _e | A | 9 |
| 440V | | A | 9 |
| 500 V | l _e | | |
| | l _e | A | 6.4 |
| 660 V 690 V | le | Α | 4.8 |
| Motor rating | P | kWh | |
| 220 V 230 V | P | kW | 2.2 |
| 240V | P | kW | 2.5 |
| 380 V 400 V | P | kW | 4 |
| 415 V | P | kW | 4.3 |
| 440 V | P _ | kW | 4.6 |
| 500 V | P _ | kW | 4 |
| 660 V 690 V | Р | kW | 4 |
| AC-4 | | | |
| Rated operational current | | | |
| Open, 3-pole: 50 – 60 Hz | | | |
| Notes | | | At maximum permissible ambient air temperature. |
| 220 V 230 V | l _e | Α | 6.6 |
| 240 V | le | Α | 6.6 |
| 380 V 400 V | l _e | Α | 6.6 |
| 415 V | le | Α | 6.6 |
| 440 V | I _e | Α | 6.6 |
| 500 V | l _e | Α | 5 |
| 660 V 690 V | I _e | Α | 3.4 |
| Motor rating | P | kWh | |
| | | | |

| 240 V 00 V 10 V 10 V 10 V 10 V 10 V 10 V | 220 V 230 V | Р | kW | 1.5 |
|--|---|------------------|------------------|------------------|
| 180 | | | | |
| Asi | | | | |
| Add | | | | |
| Book | | | | |
| Section Parameter Parame | | | | |
| Decinit organizational carrier topes | | | | |
| Reader of presidential current opens | | Р | kW | 3 |
| DC-1 | | | | |
| 12 V | | | | |
| 1 | | 1 | ٨ | 20 |
| 100 V | | | | |
| 110 V | | | | |
| Majorite Systems Majorite Ma | | I _e | | |
| Monage to systems Victage to brain race AC apperated AC apperated Doel frequency coil 5000 Me Pick-up x U _c 0.85 - 1.1 Power consumption AC apperation VX 30 Deal-frequency coil 5000 Me to st 50 Me Pick-up VX 30 Deal-frequency coil 5000 Me to st 50 Me Sealing VX 54 Deal-frequency coil 5000 Me at 50 Me Sealing VX 54 Deal-frequency coil 5000 Me at 50 Me Sealing VX 24 Deal-frequency coil 5000 Me at 50 Me Pick-up VX 29 Deal-frequency coil 5000 Me at 50 Me Pick-up VX 29 Deal-frequency coil 5000 Me at 50 Me Pick-up VX 29 Deal-frequency coil 5000 Me at 50 Me Pick-up VX 29 Deal-frequency coil 5000 Me at 50 Me Pick-up VX 29 Deal-frequency coil 5000 Me at 50 Me Pick-up VX 10 Deal-frequency coil 5000 Me at 50 Me Pick-up VX 10 Deal-frequency coil 5000 Me at 50 Me Pick-up V | 110 V | I _e | Α | |
| Voltage to terrance AC operated Dun-Integrancy col 58080 ft 2 Pick-up x U _e 0.85 - 1.1 AC operation Dun-Integrancy col 58080 ft 2 at 50 ft 2 Pick-up v 30 Dun-Integrancy col 58080 ft 2 at 50 ft 2 Pick-up V 25 Dun-Integrancy col 58080 ft 2 at 50 ft 2 Sealing VA 54 Dun-Integrancy col 58080 ft 2 at 50 ft 2 Sealing VA 29 Dun-Integrancy col 58080 ft 2 at 50 ft 2 Pick-up VA 29 Dun-Integrancy col 58080 ft 2 at 50 ft 2 Pick-up VA 29 Dun-Integrancy col 58080 ft 2 at 50 ft 2 Sealing VA 29 Dun-Integrancy col 58080 ft 2 at 50 ft 2 Sealing VA 29 Dun-Integrancy col 58080 ft 2 at 50 ft 2 Sealing VA 29 Dun-Integrancy col 58080 ft 2 at 50 ft 2 Sealing VA 29 Dun-Integrancy col 58080 ft 2 at 50 ft 2 Sealing VA 29 Dun-Integrancy col 58080 ft 2 at 50 ft 2 Sealing W VB 18 Dun-Integrancy col 58080 ft 2 at 50 ft 2 Sea | | l _e | Α | 20 |
| AC operated Dash-frequency col 50/80 ft/ Feb. Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL So Dash-frequency col 50/80 ft at 50 ft Pick up VL So Dash-frequency col 50/80 ft at 50 ft Pick up VL So Dash-frequency col 50/80 ft at 50 ft Pick up VL So Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft at 50 ft Pick up VL Dash-frequency col 50/80 ft P | | | | |
| Dual-frequency coil 5008 Mz Pick-up XU | | | | |
| Power consumption | | D: / | | 005.44 |
| AC operation Pick-up VA 30 | | Pick-up | x U _c | 0.85 - 1.1 |
| Dual-froquency coil 50/60 Hz at 50 Hz Pick-up VA 50 | | | | |
| Dual-frequency coil 50600 Hz at 50 Hz | | | | |
| Dual-frequency coil 50/60 Hz at 50 Hz | | | VA | 30 |
| Dual-frequency coil 5080 Hz at 50 Hz | | | W | 26 |
| Dual-frequency coll 5000 Hz at 60 Hz Dual-frequency coll 5000 Hz at 60 Hz at 60 Hz Dual-frequency coll 5000 | Dual-frequency coil 50/60 Hz at 50 Hz | Sealing | VA | 5.4 |
| Dual-frequency coil 50/60 Hz at 60 Hz Pick-up W 24 Dual-frequency coil 50/60 Hz at 60 Hz Soaling VA 18 Dual-frequency coil 50/60 Hz at 60 Hz Soaling W 18 Duty factor WU 10 Switching times at 100 W U _c W Image: Closing delay Min. | | Sealing | W | 1.8 |
| Dual-frequency coil 50/80 Hz at 60 Hz Sealing VA 39 Dualy-frequency coil 50/80 Hz at 60 Hz Sealing W 18 Dualy-frequency coil 50/80 Hz at 60 Hz Sealing W 10 Switching times at 100 % U _c W 10 Closing delay M 1 Closing delay min. ms 14 Closing delay max. ms 12 Opening delay max. ms 18 Opening delay max. ms 18 Closing delay with top mounting auxiliary contact ms 18 Reversing contactors ms 18 Changeover time at 10 % U _c ms 12 Changeover time max. ms 12 A Cring time at 850 V AC ms 12 Changeover time at 10 % U _c ms 12 Turnet heat losses (3- or 4-pole) w 12 at I _t to AC-3/400 V y 12 Impedance per pole w 12 Auxiliary contacts w 12 Posting | | Pick-up | VA | 29 |
| Dual-frequency coil 50/60 Hz at 60 Hz Sealing W 1.8 | Dual-frequency coil 50/60 Hz at 60 Hz | Pick-up | W | 24 |
| Duty factor % DF 100 Switching times at 100 % U _c | Dual-frequency coil 50/60 Hz at 60 Hz | Sealing | VA | 3.9 |
| Switching times at 100 % U _c ms Make contact ms Closing delay ms Closing delay min. ms Closing delay max. ms Opening delay min. ms Opening delay min. ms Opening delay max. ms Closing delay with top mounting auxiliary contact ms Reversing contactors ms Changeover time at 110 % U _c ms Changeover time max. ms Aching time at 680 V AC ms Current heat losses (3- or 4-pole) 12 at I _B , 50 °C W 5.9 at I _B , 50 °C A-gole) W 5.9 at I _B to AC-3/400 V W 1.2 Impedance per pole m0 9.18 Auxiliary contacts V 5.9 Rated impulse withstand voltage W 6000 Overvoltage category/pollution degree III/3 Rated insulation voltage V AC 600 Overvoltage category/pollution degree IIII/3 Rated dinsulation | Dual-frequency coil 50/60 Hz at 60 Hz | Sealing | W | 1.8 |
| Make contact ms Closing delay ms Closing delay min. ms 14 Closing delay max. ms 21 Opening delay min. ms 8 Opening delay min. ms 8 Opening delay max. ms 18 Closing delay with top mounting auxiliary contact ms 45 Reversing contactors ms 45 Changeover time at 110 % U _c ms 16 Changeover time min. ms 16 Changeover time max. ms 12 Arcing time at 890 VAC ms 12 Current heat losses (3- or 4-pole) W 5 at l ₀ to AC-3/400 V W 5 at l ₀ to AC-3/400 V W 12 Impedance per pole MQ 9.18 Auxiliary contacts Yes Rated impulse withstand voltage U _{mp} VAC 6000 Overvoltage category/pollution degree III/3 8 Rated operational voltage U _m <td< td=""><td>Duty factor</td><td></td><td>% DF</td><td>100</td></td<> | Duty factor | | % DF | 100 |
| Closing delay min. | Switching times at 100 % U _c | | | |
| Closing delay min. Closing delay max. Opening delay Opening delay min. Ins 8 8 Closing delay win. Ins 9 8 Closing delay min. Ins 9 In | Make contact | | ms | |
| Closing delay max. Opening delay min. Opening delay min. Opening delay max. Mis 8 Closing delay max. Mis 18 Closing delay with top mounting auxiliary contact Reversing contactors Changeover time at 110 % U _c Changeover time min. Changeover time max. Arcing time at 690 V AC Current heat losses (3- or 4-pole) at I _{th} , 50 °C W 5.9 at I _c to AC-3/400 V Impedance per pole Auxiliary contacts Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module Rated impulse withstand voltage U _{imp} V AC Rated operational voltage U _i V AC Roo Rated operational voltage U _i V AC Rated operational voltage U _i V AC Rated operational voltage U _i V AC Rated operational voltage | Closing delay | | ms | |
| Opening delay min. Opening delay max. Closing delay with top mounting auxiliary contact Reversing contactors Changeover time at 110 % U _c Changeover time min. Changeover time max. Arcing time at 690 V AC Current heat losses (3- or 4-pole) at I _{th} , 50 °C Auxiliary contacts Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module Rated inpulse withstand voltage Rated insulation voltage Rated operational voltage Verently a voltage of the v | Closing delay min. | | ms | 14 |
| Opening delay min. Opening delay max. Closing delay with top mounting auxiliary contact Reversing contactors Changeover time at 110 % U _c Changeover time min. Changeover time max. Arcing time at 690 V AC Current heat losses (3- or 4-pole) at I _{th} , 50 °C at I _e to AC-3/400 V Impedance per pole Auxiliary contacts Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module Auxiliary contacts Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module Quinpub Auxiliary contacts Rated impulse withstand voltage Ui VAC Rated operational voltage Rated operational voltage Rated operational voltage VAC 600 Rated operational voltage VAC 600 VAC 600 | Closing delay max. | | ms | 21 |
| Opening delay max. Closing delay with top mounting auxiliary contact Reversing contactors Changeover time at 110 % U _c Changeover time min. Changeover time max. Arcing time at 590 V AC Current heat losses (3- or 4-pole) at I _{th} , 50 °C at I _e to AC-3/400 V Impedance per pole Auxiliary contacts Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module Overvoltage category/pollution degree Rated insulation voltage Rated operational voltage Ve VAC 6000 Rated operational voltage Ve VAC 6000 Rated operational voltage Ve VAC 6000 | Opening delay | | ms | |
| Closing delay with top mounting auxiliary contact Reversing contactors Changeover time at 110 % U _c Changeover time at 110 % U _c Ms 16 Changeover time max. Arcing time at 890 V AC Current heat losses (3- or 4-pole) at l _{th} , 50 °C at l _q to AC-3/400 V Impedance per pole Auxiliary contacts Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module Rated impulse withstand voltage Overvoltage category/pollution degree Rated operational voltage VaC VaC 600 Rated operational voltage VaC 600 Rated operational voltage VaC 600 Rated operational voltage VaC 600 | Opening delay min. | | ms | 8 |
| Reversing contactors Changeover time at 110 % U _c Changeover time min. Changeover time max. Arcing time at 690 V AC Current heat losses (3- or 4-pole) at I _{th} , 50 °C At I _g to AC-3/400 V Impedance per pole Auxiliary contacts Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module Rated impulse withstand voltage Overvoltage category/pollution degree Rated insulation voltage Rated operational voltage Ve VAC 600 Rated operational voltage Ve VAC 600 Rated operational voltage | Opening delay max. | | ms | 18 |
| Changeover time at 110 % U _c Changeover time min. Changeover time max. Arcing time at 690 V AC Current heat losses (3- or 4-pole) at I _{th} , 50 °C At I _e to AC-3/400 V Impedance per pole Auxiliary contacts Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module Rated impulse withstand voltage Queryoltage category/pollution degree Rated operational voltage Rated operational voltage Rated operational voltage U _e V AC 600 Rated operational voltage U _e V AC 600 Rated operational voltage U _e V AC 600 | Closing delay with top mounting auxiliary contact | | ms | 45 |
| Changeover time min. Changeover time max. Arcing time at 690 V AC Current heat losses (3- or 4-pole) at I _{th} , 50 °C at I _e to AC-3/400 V Impedance per pole Auxiliary contacts Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module Rated impulse withstand voltage Overvoltage category/pollution degree Rated operational voltage Rated operational voltage U _e V AC Mms 21 S.9 S.9 S.9 S.9 S.9 S.9 S.9 S. | Reversing contactors | | | |
| Changeover time max. Arcing time at 690 V AC Current heat losses (3- or 4-pole) at I _{th} , 50 °C at I _g to AC-3/400 V Impedance per pole Auxiliary contacts Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module Rated impulse withstand voltage Uimp V AC 6000 Rated operational voltage Ui V AC 690 Rated operational voltage Ue V AC 600 | Changeover time at 110 % $\mathrm{U_{c}}$ | | | |
| Arcing time at 690 V AC Current heat losses (3- or 4-pole) at I _{th} , 50 °C | Changeover time min. | | ms | 16 |
| Current heat losses (3- or 4-pole) at I _{th} , 50 °C at I _e to AC-3/400 V Impedance per pole Auxiliary contacts Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module Rated impulse withstand voltage Overvoltage category/pollution degree Rated operational voltage U _i V AC 600 Rated operational voltage U _e V AC 600 | Changeover time max. | | ms | 21 |
| at I _{th} , 50 °C at I _e to AC-3/400 V Impedance per pole Auxiliary contacts Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module Rated impulse withstand voltage Overvoltage category/pollution degree Rated operational voltage U _i V AC 600 Rated operational voltage U _e V AC 600 | | | ms | 12 |
| at I _e to AC-3/400 V Impedance per pole Auxiliary contacts Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module Rated impulse withstand voltage Uimp V AC 6000 Overvoltage category/pollution degree Rated operational voltage Ui V AC 600 Rated operational voltage Ue V AC 600 | | | | |
| Impedance per pole Auxiliary contacts Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module Rated impulse withstand voltage Uimp V AC 6000 Overvoltage category/pollution degree Rated insulation voltage Ui V AC 690 Rated operational voltage Ue V AC 600 | | | | |
| Auxiliary contacts Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module Rated impulse withstand voltage Overvoltage category/pollution degree Rated insulation voltage Ui V AC 600 Rated operational voltage Ue V AC 600 | | | W | 1.2 |
| Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module Rated impulse withstand voltage Uimp V AC 6000 Overvoltage category/pollution degree Rated insulation voltage Ui V AC 690 Rated operational voltage Ue V AC 600 | | | mΩ | 9.18 |
| module Rated impulse withstand voltage Overvoltage category/pollution degree Rated insulation voltage Ui VAC 6000 III/3 Rated operational voltage Ue VAC 600 | | | | V _r - |
| Overvoltage category/pollution degree III/3 Rated insulation voltage U _i V AC 690 Rated operational voltage U _e V AC 600 | | | | Yes |
| Rated insulation voltage U _i V AC 690 Rated operational voltage U _e V AC 600 | Rated impulse withstand voltage | U _{imp} | V AC | 6000 |
| Rated operational voltage U _e V AC 600 | Overvoltage category/pollution degree | | | III/3 |
| | Rated insulation voltage | Ui | V AC | 690 |
| Safe isolation to EN 61140 | Rated operational voltage | U _e | V AC | 600 |
| | Safe isolation to EN 61140 | | | |

| between coil and auxiliary contacts | | V AC | 300 |
|--|-----------------|-------------------|--|
| between the auxiliary contacts | | V AC | 300 |
| Rated operational current | | | |
| AC-15 | | | |
| 220 V 240 V | l _e | Α | 6 |
| 380 V 415 V | l _e | Α | 3 |
| 500 V | I _e | Α | 1.5 |
| DC L/R ≦ 15 ms | | | |
| Contacts in series: | | A | |
| 1 | 24 V | Α | 2.5 |
| 2 | 60 V | A | 2.5 |
| 3 | 100 V | Α | 1.5 |
| 3 | 220 V | Α | 0.5 |
| Conv. thermal current | I _{th} | Α | 10 |
| Control circuit reliability | Failure rate | λ | $<10^{-8}$, $<$ one failure at 100 million operations (at U _e = 24 V DC, U _{min} = 17 V, I _{min} = 5.4 mA) |
| Component lifespan at $U_e = 240 \text{ V}$ | | | |
| AC-15 | Operations | x 10 ⁶ | 0.2 |
| DC current | | X 10 | |
| $L/R = 50$ ms: 2 contacts in series at $I_e = 0.5$ A | Operations | x 10 ⁶ | 0.15 |
| | Operations | X 10 | |
| Notes | | | Switch-on and switch-off conditions based on DC-13, time constant as specified |
| Short-circuit rating without welding | | | |
| Maximum overcurrent protective device Short-circuit protection only | | | PKZM0-4 |
| Short-circuit protection maximum fuse | | | T NZ (VIU-4 |
| 500 V | | A gG/gL | 6 |
| 500 V | | A fast | 10 |
| Current heat loss at a load of I _{th} per contact | | W | 1.1 |
| Rating data for approved types | | • | |
| Switching capacity | | | |
| Maximum motor rating | | | |
| Three-phase | | | |
| 200 V 208 V | | HP | 2 |
| 230 V 240 V | | HP | 3 |
| 460 V 480 V | | HP | 5 |
| 575 V 600 V | | HP | 5 |
| Single-phase | | | |
| 115 V 120 V | | НР | 0.5 |
| 230 V 240 V | | HP | 1.5 |
| General use | | Α | 15 |
| Auxiliary contacts | | | |
| Pilot Duty | | | |
| AC operated | | | A600 |
| DC operated | | | P300 |
| General Use | | | |
| AC | | V | 600 |
| AC | | A | 10 |
| DC | | V | 250 |
| DC Short Circuit Current Rating | | A SCCR | 0.5 |
| SHOLL GILCUIT GULLETIL NAUHÜ | | SUUR | |

| SCCR | kA | 5 |
|-----------|----|----|
| max. Fuse | А | 45 |

Design verification as per IEC/EN 61439

| boolgii vormoution do por 120/214 or 100 | | | |
|--|-------------------|----|--|
| Technical data for design verification | | | |
| Rated operational current for specified heat dissipation | In | Α | 9 |
| Heat dissipation per pole, current-dependent | P _{vid} | W | 0.4 |
| Equipment heat dissipation, current-dependent | P _{vid} | W | 1.2 |
| Static heat dissipation, non-current-dependent | P _{vs} | W | 1.8 |
| Heat dissipation capacity | P _{diss} | W | 0 |
| Operating ambient temperature min. | uiss | °C | -25 |
| Operating ambient temperature max. | | °C | 50 |
| IEC/EN 61439 design verification | | | |
| 10.2 Strength of materials and parts | | | |
| 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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 Insulation properties | | | |
| 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 switch gear must be observed. $\label{eq:constraint}$ |
| 10.12 Electromagnetic compatibility | | | Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$ |
| 10.13 Mechanical function | | | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed. |
| | | | |

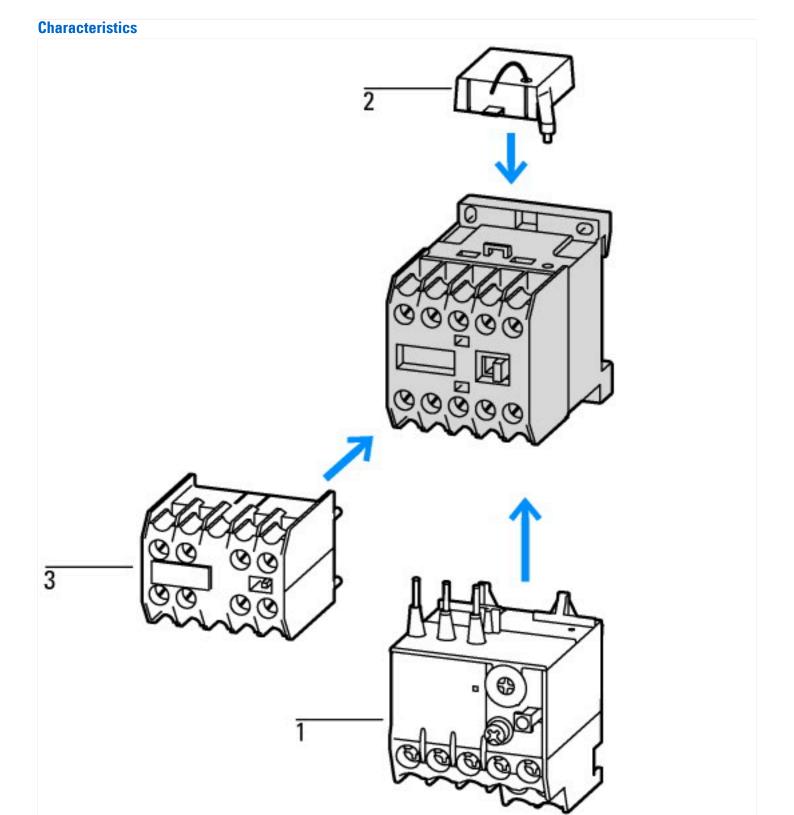
Technical data ETIM 7.0

| Low-voltage industrial components (EG000017) / Power contactor, AC switching (EC000066) | | | | |
|---|----------------|-----------|---|--|
| Electric engineering, automation, process control engineering / Low-voltage switc | h technology / | Contactor | (LV) / Power contactor, AC switching (ecl@ss10.0.1-27-37-10-03 [AAB718015]) | |
| Rated control supply voltage Us at AC 50HZ | | ٧ | 42 - 42 | |
| Rated control supply voltage Us at AC 60HZ | | ٧ | 42 - 42 | |
| Rated control supply voltage Us at DC | | ٧ | 0 - 0 | |
| Voltage type for actuating | | | AC | |
| Rated operation current le at AC-1, 400 V | | Α | 22 | |
| Rated operation current le at AC-3, 400 V | | Α | 9 | |
| Rated operation power at AC-3, 400 V | | kW | 4 | |
| Rated operation current le at AC-4, 400 V | | Α | 6.6 | |
| Rated operation power at AC-4, 400 V | | kW | 3 | |
| Rated operation power NEMA | | kW | 3.7 | |
| Modular version | | | No | |
| Number of auxiliary contacts as normally open contact | | | 0 | |
| | | | | |

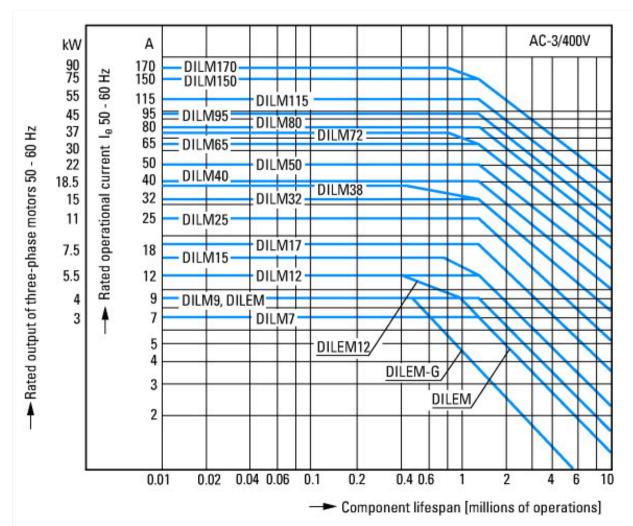
| Number of auxiliary contacts as normally closed contact | 1 |
|---|------------------|
| Type of electrical connection of main circuit | Screw connection |
| Number of normally closed contacts as main contact | 0 |
| Number of main contacts as normally open contact | 3 |

Approvals

| Product Standards | IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking |
|--------------------------------------|---|
| UL File No. | E29096 |
| UL Category Control No. | NLDX |
| CSA File No. | 012528 |
| CSA Class No. | 3211-04 |
| North America Certification | UL listed, CSA certified |
| Specially designed for North America | No |



- 1: Overload relay 2: Suppressor 3: Auxiliary contact modules Enclosure totally insulated



Normal AC induction motor
Operating characteristics
Switch on: from stop
Switch off: during run
Electrical characteristics:
Switch on: up to 6 x Rated motor current
Switch off: up to 1 x Rated motor current
Utility category
100 % AC-3
Typical Applications
Compressors
Lifts

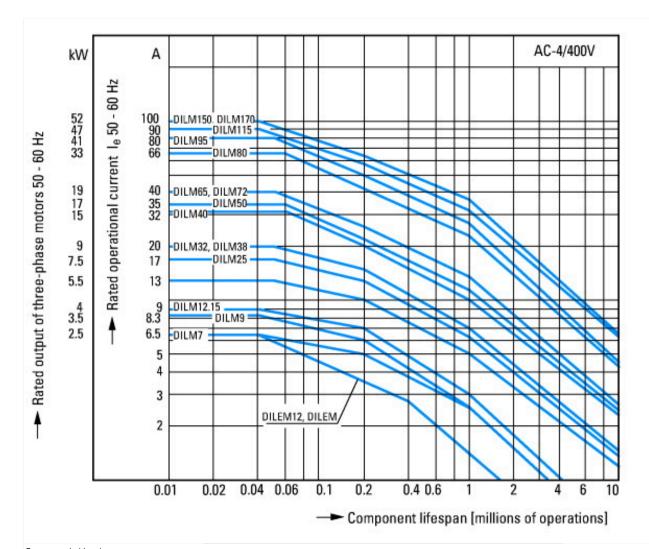
Lifts Mixers

Pumps Escalators Agitators

fan Conveyor belts Centrifuges Hinged flaps

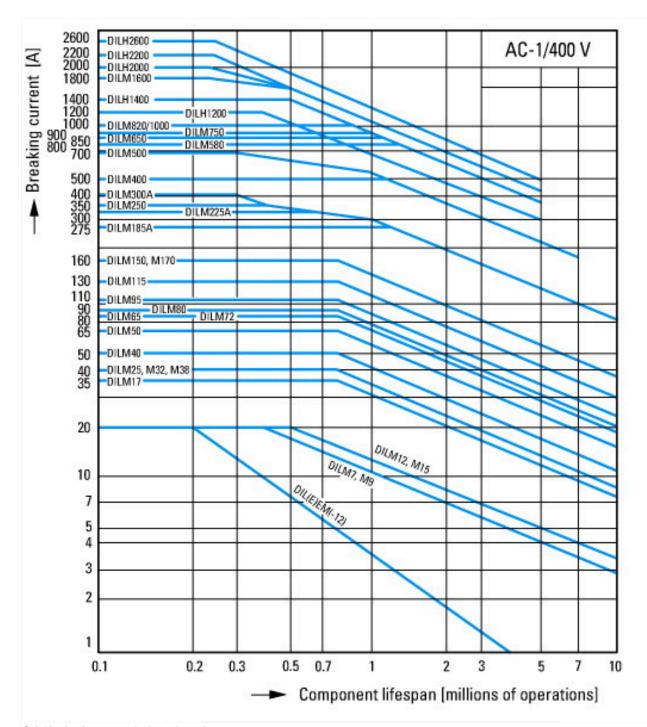
Bucket-elevator Air-conditioning systems

General drives for manufacturing and processing machines

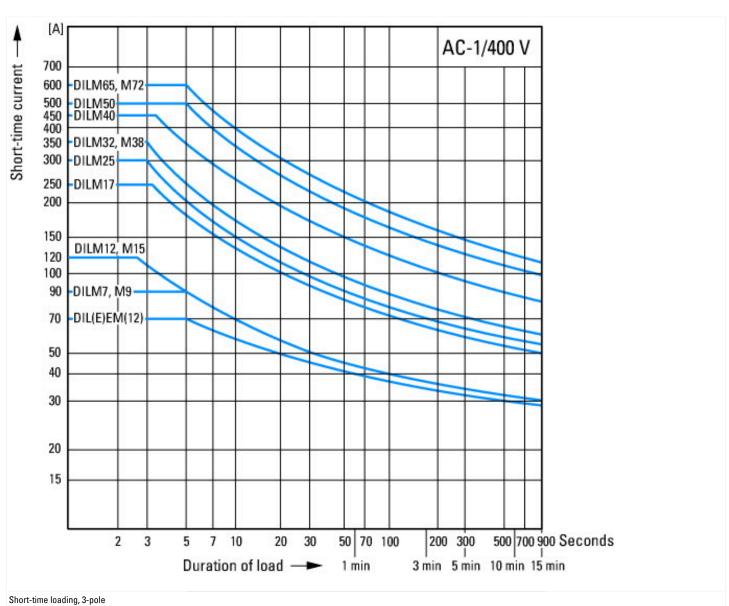


Extreme switching duty Squirrel-cage motor Operating characteristics Inching, plugging, reversing Electrical characteristics Make: up to 6 x rated motor current Break: up to 6 x rated motor current Utilization category 100 % AC-4 Typical applications Printing presses Wire-drawing machines Centrifuges

Special drives for manufacturing and processing machines

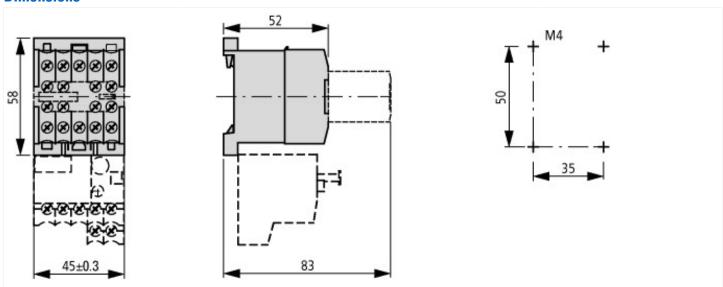


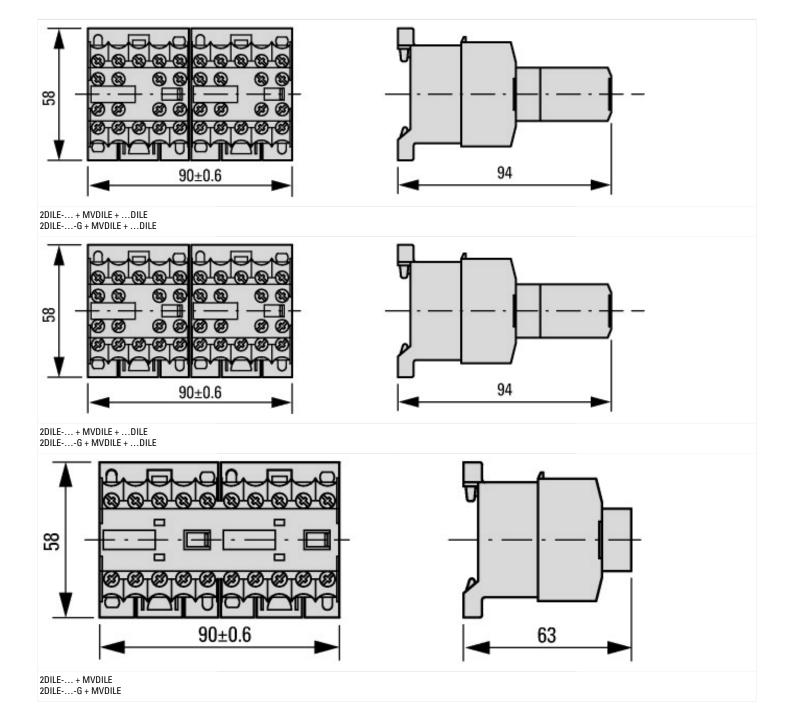
Switching duty for non-motor loads, 3-pole, 4-pole Operating characteristics
Non-inductive or slightly inductive loads
Electrical characteristics
Make: 1 x rated current
Break: 1 x rated current
Utilization category
100 % AC-1
Typical applications



Time interval between two loading cycles: 15 minutes

Dimensions





Additional product information (links)

IL03407009Z (AWA2100-0882) mini contactor relay

IL03407009Z (AWA2100-0882) mini contactor relay

https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407009Z2020_05.pdf