

Auxiliary contact module, 4 pole, 2 N/O, 2 NC, Front fixing, Screw terminals, DILE(E)M

Part no. 22DILEM
Catalog No. 010112
Alternate Catalog No. XTMCXFC22
EL-Nummer (Norway) 4130387

Delivery program

| | | | |
|----------------------------------|----------------|---|--|
| Accessories | | | Auxiliary contact modules |
| Description | | | with interlocked opposing contacts Switching elements according to EN 50012 Switching elements according to EN 50012 are to be preferred. Version E combinations correspond to EN 50011 and are to be preferred. |
| Function | | | for standard applications |
| Number of poles | | | 4 pole |
| Connection technique | | | Screw terminals |
| Rated operational current | | | |
| AC-15 | | | |
| 220 V 230 V 240 V | I _e | A | 4 |
| 380 V 400 V 415 V | I _e | A | 2 |
| Contacts | | | |
| N/O = Normally open | | | 2 N/O |
| N/C = Normally closed | | | 2 NC |
| Mounting type | | | Front fixing |
| Contact sequence | | | |
| For use with | | | DILEM-10(-G)(...) DILEM-4(-G)(...) DILEEM-10(-G)(...) DILEM12-10(-G)(...) |
| Instructions | | | Interlocked opposing contacts according to IEC/EN 60947-5-1 appendix L, inside the auxiliary contact modules, also for the integrated auxiliary contacts of the DILER, DILE(E)M Auxiliary contacts used as mirror contacts according to IEC/EN 60947-4-1 Appendix F (not N/C late open) |

Technical data

| | | | |
|---|--------------|-------------------|--|
| General | | | |
| Standards | | | IEC/EN 60947, VDE 0660, UL, CSA |
| Lifespan, mechanical | | | |
| AC operated | Operations | x 10 ⁶ | 10 |
| DC operated | Operations | x 10 ⁶ | 20 |
| Component lifespan at U _e = 240 V | | | |
| AC-15 | Operations | x 10 ⁶ | 0.2 |
| DC | | | |
| L/R = 50 ms: 2 contacts in series at I _e = 0.5 A | Operations | x 10 ⁶ | 0.15 |
| Maximum operating frequency | Operations/h | | 9000 |
| Climatic proofing | | | Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 |
| Ambient temperature | | | |
| Open | | °C | -25 - +50 |
| Enclosed | | °C | - 25 - 40 |
| Ambient temperature, storage | | °C | - 40 - 80 |
| Mounting position | | | |
| Mounting position | | | As required, except vertical with terminals A1/A2 at the bottom |
| Mechanical shock resistance (IEC/EN 60068-2-27) | | | |
| Half-sinusoidal shock, 10 ms | | | |

| | | | |
|---|--|-----------------|--------------------------------------|
| Basic unit with auxiliary contact module | | g | |
| N/O contact | | g | 10 |
| N/C contact | | g | 8 |
| Degree of Protection | | | IP20 |
| Protection against direct contact when actuated from front (EN 50274) | | | Finger and back-of-hand proof |
| Weight | | kg | 0.04 |
| Terminal capacities | | mm ² | |
| 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 | Single 18 – 14/Double 18 – 14 |
| 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 |

Contacts

| | | | |
|---|------------------|---------|--|
| Interlocked opposing contacts within an auxiliary contact module (to IEC 60947-5-1 Annex L) | | | Yes |
| Rated impulse withstand voltage | U _{imp} | V AC | 6000 |
| Overvoltage category/pollution degree | | | III/3 |
| Rated insulation voltage | U _i | V AC | 690 |
| 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 | | A | |
| Conventional free air thermal current, 1 pole | | | |
| Notes | | | At maximum permissible ambient air temperature. |
| Conv. thermal current | I _{th} | A | 10 |
| AC-15 | | | |
| 220 V 230 V 240 V | I _e | A | 4 |
| 380 V 400 V 415 V | I _e | A | 2 |
| 500 V | I _e | A | 1.5 |
| DC current | | | |
| | | | Switch-on and switch-off conditions based on DC-13, time constant as specified. |
| DC L/R ≤ 15 ms | | | |
| Contacts in series: | | A | |
| 1 | 24 V | A | 2.5 |
| 2 | 60 V | A | 2.5 |
| 3 | 110 V | A | 1.5 |
| 3 | 220 V | A | 0.5 |
| 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) |
| Short-circuit rating without welding | | | |
| Maximum overcurrent protective device | | | |
| 220 V 230 V 240 V | | PKZM0 | 4 |
| 380 V 400 V 415 V | | PKZM0 | 4 |
| Short-circuit protection maximum fuse | | | |
| 500 V | | A gG/gL | 6 |
| 500 V | | A fast | 10 |
| Current heat loss at I _{th} | | | |
| AC operated | | W | 1.5 |
| DC operated | | W | 1.5 |

| | | |
|---|----|------|
| Current heat loss per auxiliary circuit at I _g (AC-15/230 V) | CO | 0.24 |
| Rating data for approved types | | |
| Auxiliary contacts | | |
| Pilot Duty | | |
| AC operated | | A600 |
| DC operated | | P300 |
| General Use | | |
| AC | V | 600 |
| AC | A | 10 |
| DC | V | 250 |
| DC | A | 0.5 |

Design verification as per IEC/EN 61439

| | | | |
|--|-------------------|----|--|
| Technical data for design verification | | | |
| Rated operational current for specified heat dissipation | I _n | A | 4 |
| Heat dissipation per pole, current-dependent | P _{vid} | W | 0.24 |
| Equipment heat dissipation, current-dependent | P _{vid} | W | 0 |
| Static heat dissipation, non-current-dependent | P _{vs} | W | 0 |
| Heat dissipation capacity | P _{diss} | W | 0 |
| Operating ambient temperature min. | | °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 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 8.0

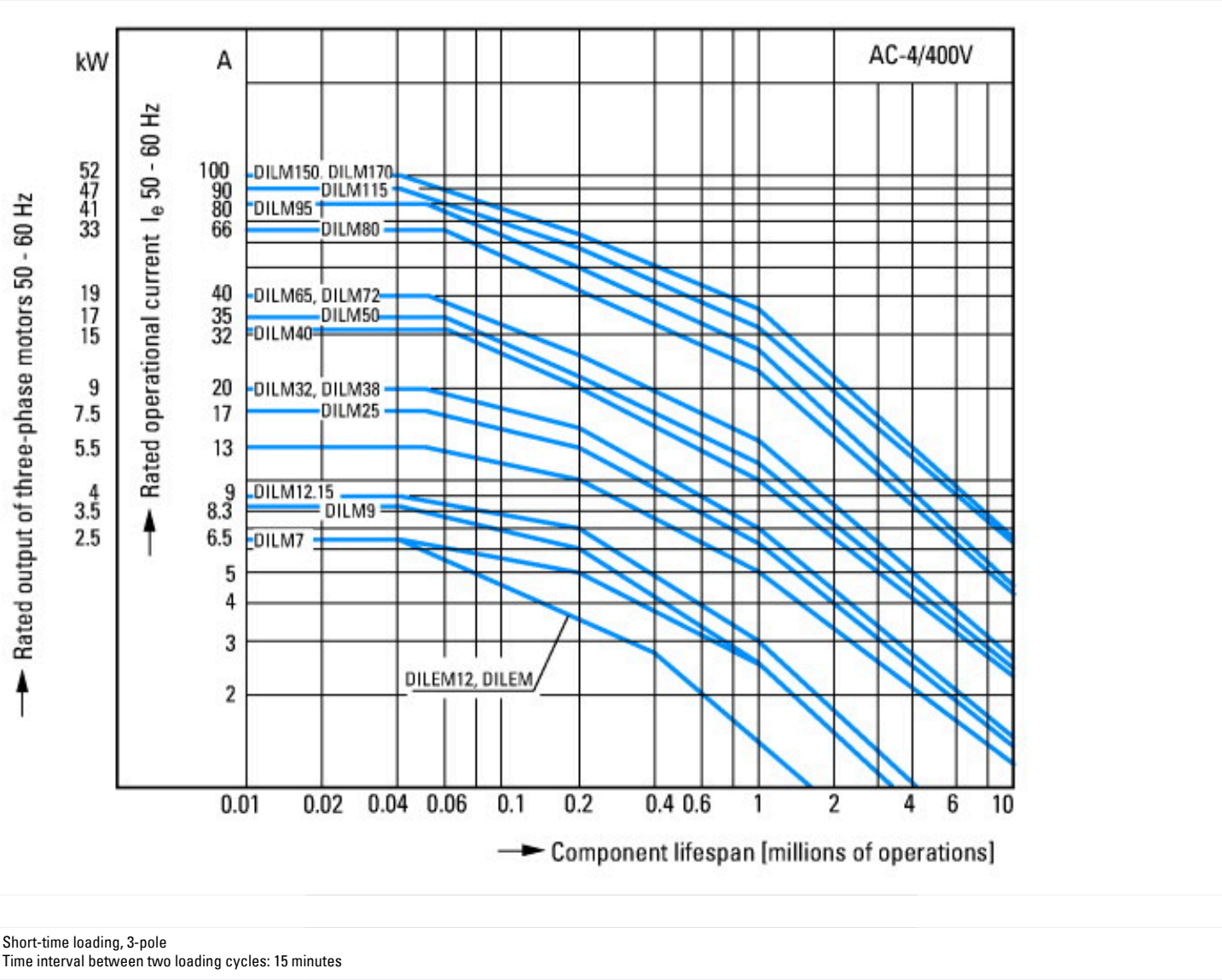
| | | |
|--|--|---|
| Low-voltage industrial components (EG000017) / Auxiliary contact block (EC000041) | | |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (ecI@ss10.0.1-27-37-13-02 [AKN342013]) | | |
| Number of contacts as change-over contact | | 0 |
| Number of contacts as normally open contact | | 2 |

| | | | |
|--|--|---|------------------|
| Number of contacts as normally closed contact | | | 2 |
| Number of fault-signal switches | | | 0 |
| Rated operation current I _e at AC-15, 230 V | | A | 4 |
| Type of electric connection | | | Screw connection |
| Model | | | Top mounting |
| Mounting method | | | Front fastening |
| Lamp holder | | | None |

Approvals

| | | | |
|--------------------------------------|--|--|---|
| Product Standards | | | IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking |
| UL File No. | | | E29184 |
| UL Category Control No. | | | NKCR |
| CSA File No. | | | 012528 |
| CSA Class No. | | | 3211-03 |
| North America Certification | | | UL listed, CSA certified |
| Specially designed for North America | | | No |

Characteristics



Short-time loading, 3-pole
Time interval between two loading cycles: 15 minutes

Dimensions

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|----------------------------------|
| 83 mm: DILE... + ...DILE(M) |
| 86 mm: DILE...-C... + ...DILE(M) |

Additional product information (links)

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|---|
| IL03407009Z (AWA2100-0882) Mini contactor relay |
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