DATASHEET - DILA-XHI20

EATON Powering Business Worldwide^{*}

| Auxiliary contact module, 2 pole, lth= 16 A, 2 N/O, Front fixing, \$ | Screw |
|--|-------|
| terminals, DILA, DILM7 - DILM38 | |

| Part no. Catalog No. | DILA-XHI20 276422 |
|-------------------------|----------------------|
| Alternate Catalog | XTCEXFAC20 |
| No. EL-Nummer | 4130214 |
| (Norway) | |

Delivery program

| Derivery program | | | |
|---|-----------------|---|---|
| Accessories | | | Auxiliary contact modules |
| Description | | | with interlocked opposing contacts Switching elements according to EN 50005 Version E combinations correspond to EN 50011 and are to be preferred. The DC operated contactor DILA(C)-22 must only be combined with 2-pole auxiliary contacts. |
| Function | | | for standard applications |
| Number of poles | | | 2 pole |
| Connection technique | | | Screw terminals |
| Rated operational current | | | |
| Conventional free air thermal current, 1 pole | | | |
| Open | | | |
| at 60 °C | I _{th} | А | 16 |
| AC-15 | | | |
| 220 V 230 V 240 V | Ι _e | А | 4 |
| 380 V 400 V 415 V | Ι _e | А | 4 |
| Contacts | | | |
| N/O = Normally open | | | 2 N/0 |
| Mounting type | | | Front fixing |
| For use with | | | DILA(C) DILM(C)7 DILM(C)12 DILM(C)15 DILM(C)15 DILM(C)25 DILM(C)25 DILM(C)32 DILMP20 DILMP20 DILMP32 DILMF8 DILMF8 DILMF8 DILMF11 DILMF14 DILMF17 DILMF12 DILMF32 |
| Type Instructions | | | Front mounting auxiliary contact 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 DILM 7 - DILM32 Auxiliary contacts used as mirror contacts according to IEC/EN 60947-4-1 Appendix F (not N/C late open) |
| Code number and version of combination | | | |
| Distinctive number | | | 60E |
| with basic device | | | DILA(C)-40 |
| | | | 51 |
| with basic device | | | DILA(C)-31 |
| | | | 42 |
| | | | |

Technical data

General Standards

IEC/EN 60947, VDE 0660, UL, CSA

| AcqueredNameNumberNumberDependentNumberNumberSectorNumberNumberSectorNumberNumberSectorNumberNumberSectorNumberNumberSectorNumberNumberSectorNumberNumberSectorNumberNumberSectorNumberNumberSectorNumberNumberSectorNumberNumberSectorNumberNumberSectorNumberNumberSectorNumberNumberNumberNumberNumberSectorNumber <td< th=""><th>Lifespan, mechanical</th><th></th><th></th><th></th></td<> | Lifespan, mechanical | | | |
|---|---|------------------|-------------------|---|
| NoteNo | | Onerations | c | 10 |
| Any off part of part o | • | | | |
| NoteN | DC operated | Operations | x 10 ⁶ | 10 |
| NamePartnerP | Component lifespan | | | |
| Anima of the sector of the s | at U _e = 230 V, AC-15, 3 A | Operations | x 10 ⁶ | 1.3 |
| wind wind wind wind wind wind wind wind | Maximum operating frequency | Operations/h | | 9000 |
| NoteNo | Climatic proofing | | | |
| Exclusi 9 9 9 Ander thereation, strings 9 9 Ander thereation | Ambient temperature | | | |
| Abelet departance, stargedParta9-30Bela induction that NASSE 271IBase and Whatsain the CMSSE 271IBase and Whatsain try contac modelIBase and Whatsain try contac modelINo conterINo conterIStation of the Non-NoIStation of the Non-NoIS | Open | | °C | -25 - +60 |
| Headed shork storage GECEN 60000 2.91IIIs also undownown storage outstorage down storage outstorage down storage down stor | Enclosed | | °C | - 25 - 40 |
| Ideal and shading contained and and shading contain | Ambient temperature, storage | | °C | - 40 - 80 |
| Asia decision of the sector | Mechanical shock resistance (IEC/EN 60068-2-27) | | | |
| N0 contactN0 contactN0N0 contactNNN0 c | Half-sinusoidal shock, 10 ms | | | |
| NC contactIIlagree of traction120120Protection spate disctontact when actuated from from EN 6027 HowNoNoSector spate disctontact when actuated from from EN 6027 HowNoNoSector spate disctontact when actuated from from EN 6027 HowNoNoSector spate disctontact when actuated from from EN 6027 HowNoNoSector spate disctontact when actuated from from EN 6027 HowNoNoSector spate disctontact when actuated from from EN 6027 HowNoNoSector spate disctontact when actuated from from EN 6027 HowNoNoSector spate disctontact when actuated from from EN 6027 HowNoNoSector spate disctontact when actuated from from EN 6027 HowNoNoSector spate disctontact when actuated from from EN 6027 HowNoNoSector spate disctontact when actuated from from EN 6027 HowNoNoSector spate disctontact when actuated from from EN 6027 HowNoNoSector spate disctontact when actuated from from EN 6027 HowNoNoSector spate disctontact when actuated from from EN 6027 HowNoNoSector spate disctontact when actuated from from EN 6027 HowNoNoSector spate disctontact when actuated from from EN 6027 HowNoNoSector spate disctontact when actuated from from EN 6027 HowNoNoSector spate disctontact when actuated from from EN 6027 HowNoNoSector spate disctontact when actuated from from EN 6027 HowNoNoSector spate disc | Basic unit with auxiliary contact module | | g | |
| baye air Arisetion P20 break pained if set contract when actuated from from f(LN 502/H) Name Meripit Name ferrail carganization contract when actuated from from f(LN 502/H) Name Solid Name Solid Name Solid or stranded Name <t< td=""><td>N/O contact</td><td></td><td>g</td><td>7</td></t<> | N/O contact | | g | 7 |
| Protection spand direct cotact when a clusted from field (END SC) Protect and scholand production scholand scholand production scholand scholand production scholand scholand production scholand sch | N/C contact | | g | 5 |
| WeightIIIIIIrrend capatiesII | Degree of Protection | | | IP20 |
| Barriel capacities max Sold | Protection against direct contact when actuated from front (EN 50274) | | | Finger and back-of-hand proof |
| Series Mathematical series M | Weight | | kg | 0.039 |
| Said skip | Terminal capacities | | mm ² | |
| Fiesdie with terrule remain 2 k (0.75 - 2.5) Fiesdie with terrule remain 2 k (0.75 - 2.5) Fiesdie with terrule remain 2 k (0.75 - 2.5) Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Fiesdie with terrule Viesdie with stand voltage Vamment Fiesdie with terrule Fiesdie with terrule Viesdie withstand voltage Vamment Vamment Fiesdie with terrule Viesdie with terrule Vamment Vamment Fiesdie with terrule Viesdie with terrule Vamment Fiesdie with terrule Fiesdie with terrule Viesdie with terrule Vamment Vamment Fiesdie with terrule Viesdie witha | Screw terminals | | | |
| initial set in the set in th | Solid | | mm ² | |
| Terminal screw Note Size | Flexible with ferrule | | mm ² | |
| Poddrv serewdriver Image: Standard serewdriver Stan | Solid or stranded | | AWG | 18 – 14 |
| Standard serwid/view Image: Marci Marc | Terminal screw | | | M3.5 |
| in the set of the set | Pozidriv screwdriver | | Size | 2 |
| Contacts Contact swithin an auxiliary contact module (to EC 60947-> | Standard screwdriver | | mm | |
| http://ticket.goopsing.contacts within an auxiliary contact (bot IGE 60047-54) Marker J Ma | Max. tightening torque | | Nm | 1.2 |
| Annex J Annex J <t< td=""><td>Contacts</td><td></td><td></td><td></td></t<> | Contacts | | | |
| فاللا الجاري الحال الجار | Annex L) | 1 | | Yes |
| Norvidage category/pollution degreeNorvidageNorvidageNorvidageRated insulation voltageUVAC60Rated operational voltageVAC0Safe isolation to EN 6110VAC0between coil and auxiliary contactsVAC40between the auxiliary contactsVAC40Rated operational currentVAC40Safe isolation to EN 6110VAC40Safe isolation to EN 6110VAC40Safe isolation currentVAC40Safe isolation currentVAC40 | N/C contact (not late-break contact) suitable as a mirror contact (to IEC/EN 60947-4-1 Annex F) | | | DILM7 - DILM32 |
| And divide voltage vol | Rated impulse withstand voltage | U _{imp} | V AC | 6000 |
| Aread operational voltage Value Value Mathematical structures between coil and auxiliary contacts VAC 40 between the auxiliary contacts VAC 40 between the auxiliary contacts VAC 40 conventional free air thermal current, 1 pole A A at 60 °C A A conventional free air thermal current, 1 pole A A at 60 °C A A at 00 Val 50 Va | Overvoltage category/pollution degree | | | 111/3 |
| Safe isolation to EN 61140 (March 1994) between coil and auxiliary contacts (March 1994) between the auxilia | Rated insulation voltage | Ui | V AC | 690 |
| between coil and auxiliary contactsVACVACVACVACbetween the auxiliary contactsVACVACVACVACBated operational currentAAAAconventional free air thermal current, 1 poleAAAat 60 °CAAAAAC-15AAAA220 V 230 V 240 VIAAA380 V 400 V 415 VIAAA500 VIAAA500 VIAAADC currentIAAADC L/R ≦ 15 msIIAA124VAIA | Rated operational voltage | U _e | V AC | 500 |
| between the auxiliary contactsVAC VAC AVAC AMathematical contactsMathematical contacts< | Safe isolation to EN 61140 | | | |
| Rated operational current Mathematication Analysis < | between coil and auxiliary contacts | | V AC | 400 |
| Conventional free air thermal current, 1 pole interventional free air thermal current, 1 pole at 60 °C Hn AC-15 Interventional free air thermal current, 1 pole 220 V 230 V 240 V Ie 380 V 400 V 415 V Ie 500 V Ie 500 V Ie DC current Ie DC L/R ≤ 15 ms Intervention Image: Contacts in series: Image: Carrent 1 24 V A Image: Carrent | between the auxiliary contacts | | V AC | 400 |
| at 60 °ChAAC-15II220 V230 V240 VIeA380 V400 V415 VIeA500 VIeA500 VIeADC currentIeADC L/R ≤ 15 msI1AA1AA | Rated operational current | | А | |
| AC-15 I I 220 V 230 V 240 V Ie A 380 V 400 V 415 V Ie A 500 V Ie A 500 V Ie A DC current Ie A DC L/R ≤ 15 ms I I 1 I I 1 I I | Conventional free air thermal current, 1 pole | | | |
| 220 V 230 V 240 VIeAA380 V 400 V 415 VIeAA500 VIeAA500 VIeAADC currentIeAADC L/R ≤ 15 msIeAA1Contacts in series:AA124 VAIo | at 60 °C | I _{th} | А | 16 |
| 380 V 405 V 415 V Ie A 4 500 V Ie A 1.5 DC current Ie A 500 V DC L/R ≤ 15 ms Ie Y Y 1 24 V A 10 | AC-15 | | | |
| 500 V Ie A 1.5 DC current Image: A gradie of the second sec | 220 V 230 V 240 V | l _e | А | 4 |
| DC current A DC L/R ≤ 15 ms A 1 24 V A | 380 V 400 V 415 V | le | А | 4 |
| DC L/R ≤ 15 ms A Switch-on and switch-off conditions based on DC-13, time constant as specified. 1 24 V A 10 | 500 V | le | А | 1.5 |
| DC L/R ≦ 15 ms Image: Contacts in series: A 1 24 V A | DC current | | | Switch-on and switch-off conditions based on DC-13, time constant as specified. |
| 1 24 V A 10 | DC L/R ≦ 15 ms | | | |
| | Contacts in series: | | А | |
| 1 60 V A 6 | 1 | 24 V | А | 10 |
| | 1 | 60 V | А | 6 |

| 2 | 60 V | А | 10 |
|--|----------------|--------------|--|
| 1 | 110 V | A | 3 |
| 3 | | A | 6 |
| | 110 V | | |
| 1 | 220 V | A | 1 |
| 3 | 220 V | A | 5 |
| DC L/R ≦ 50 ms | | | |
| Contacts in series: | | A | |
| 3 | 24 V | А | 2.5 |
| 3 | 60 V | A | 1 |
| 3 | 110 V | А | 0.5 |
| 3 | 220 V | А | 0.25 |
| DC-13 (6xP) | | | |
| 24 V | le | А | 2.5 |
| 60 V | le | А | 1 |
| 110 V | le | А | 0.5 |
| 220 V | l _e | А | 0.25 |
| 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 | | | |
| Short-circuit protection maximum fuse | | | |
| 500 V | | A gG/gL | 10 |
| Current heat loss at I _{th} | | | |
| AC operated | | W | 2.6 |
| DC operated | | w | |
| | | | 2.6 |
| Current heat loss per auxiliary circuit at $\rm I_e$ (AC-15/230 V) | | CO | 0.16 |
| Current heat loss per auxiliary circuit at I _e (AC-15/230 V) Rating data for approved types | | | |
| | | | |
| Rating data for approved types | | | |
| Rating data for approved types Auxiliary contacts | | | |
| Rating data for approved types Auxiliary contacts Pilot Duty | | | 0.16 |
| Rating data for approved types Auxiliary contacts Pilot Duty AC operated | | | 0.16 A600 |
| Rating data for approved types Auxiliary contacts Pilot Duty AC operated DC operated | | | 0.16 A600 |
| Rating data for approved types Auxiliary contacts Pilot Duty AC operated DC operated General Use | | CO | 0.16 A600 P300 |
| Rating data for approved types Auxiliary contacts Pilot Duty AC operated DC operated General Use AC | | CO V | 0.16 A600 P300 600 |
| Rating data for approved types Auxiliary contacts Pilot Duty AC operated DC operated General Use AC AC | | CO V A | 0.16 A600 P300 600 10 |

Design verification as per IEC/EN 61439

| Technical data for design verification | | | |
|--|-------------------|----|--|
| Rated operational current for specified heat dissipation | I _n | А | 4 |
| Heat dissipation per pole, current-dependent | P _{vid} | W | 0.16 |
| 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 | 60 |
| 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 (ecl@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 | | | 0 |
| Number of fault-signal switches | | | 0 |
| Rated operation current le at AC-15, 230 V | | А | 4 |
| Type of electric connection | | | Screw connection |
| Model | | | Top mounting |
| Mounting method | | | Front fastening |
| Lamp holder | | | None |