

## DATASHEET - DILA-XHI13-PI



**Auxiliary contact module, 4 pole, I<sub>th</sub>= 16 A, 1 N/O, 3 NC, Front fixing, Push in terminals, DILA, DILM7 - DILM38**



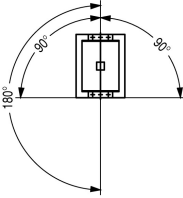
**Part no.** DILA-XHI13-PI  
**Catalog No.** 199320  
**Alternate Catalog No.** XTREXFABPI13

## Delivery program

|                                               |                 |   |                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------|-----------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Accessories                                   |                 |   | Auxiliary contact modules                                                                                                                                                                                                                                                                  |
| Description                                   |                 |   | with interlocked opposing contacts                                                                                                                                                                                                                                                         |
| Function                                      |                 |   | for standard applications                                                                                                                                                                                                                                                                  |
| Number of poles                               |                 |   | 4 pole                                                                                                                                                                                                                                                                                     |
| Connection technique                          |                 |   | Push in terminals                                                                                                                                                                                                                                                                          |
| <b>Rated operational current</b>              |                 |   |                                                                                                                                                                                                                                                                                            |
| Conventional free air thermal current, 1 pole |                 |   |                                                                                                                                                                                                                                                                                            |
| Open                                          |                 |   |                                                                                                                                                                                                                                                                                            |
| at 60 °C                                      | I <sub>th</sub> | A | 16                                                                                                                                                                                                                                                                                         |
| AC-15                                         |                 |   |                                                                                                                                                                                                                                                                                            |
| 220 V 230 V 240 V                             | I <sub>e</sub>  | A | 4                                                                                                                                                                                                                                                                                          |
| 380 V 400 V 415 V                             | I <sub>e</sub>  | A | 4                                                                                                                                                                                                                                                                                          |
| <b>Contacts</b>                               |                 |   |                                                                                                                                                                                                                                                                                            |
| N/O = Normally open                           |                 |   | 1 N/O                                                                                                                                                                                                                                                                                      |
| N/C = Normally closed                         |                 |   | 3 NC                                                                                                                                                                                                                                                                                       |
| Mounting type                                 |                 |   | Front fixing                                                                                                                                                                                                                                                                               |
| Contact sequence                              |                 |   |                                                                                                                                                                                                                                                                                            |
| For use with                                  |                 |   | DILA...-PI<br>DILM7...-PI<br>DILM9...-PI<br>DILM12...-PI<br>DILM15...-PI<br>DILM17...-PI<br>DILM25...-PI<br>DILM32...-PI<br>DILM38...-PI<br>DILMP20...-PI<br>DILMP32...-PI<br>DILMP45...-PI<br>DILM8...-PI<br>DILM11...-PI<br>DILM14...-PI                                                 |
| Type                                          |                 |   | Front mounting auxiliary contact                                                                                                                                                                                                                                                           |
| 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 DILM 7 - DILM32<br>Auxiliary contacts used as mirror contacts according to IEC/EN 60947-4-1 Appendix F (not N/C late open) |

## Technical data

|                                       |              |                   |                                                                                |
|---------------------------------------|--------------|-------------------|--------------------------------------------------------------------------------|
| <b>General</b>                        |              |                   |                                                                                |
| Standards                             |              |                   | IEC/EN 60947, VDE 0660, UL, CSA                                                |
| Component lifespan                    |              |                   |                                                                                |
| at U <sub>b</sub> = 230 V, AC-15, 3 A | Operations   | x 10 <sup>6</sup> | 1.3                                                                            |
| Maximum operating frequency           | Operations/h |                   | 9000                                                                           |
| Climatic proofing                     |              |                   | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30 |
| Ambient temperature                   |              |                   |                                                                                |
| Open                                  |              | °C                | -25 - +60                                                                      |
| Enclosed                              |              | °C                | - 25 - 40                                                                      |

|                                                                       |  |                 |                                                                                    |
|-----------------------------------------------------------------------|--|-----------------|------------------------------------------------------------------------------------|
| Ambient temperature, storage                                          |  | °C              | - 40 - 80                                                                          |
| Mounting position                                                     |  |                 |                                                                                    |
| Mounting position                                                     |  |                 |  |
| Mechanical shock resistance (IEC/EN 60068-2-27)                       |  |                 |                                                                                    |
| Half-sinusoidal shock, 10 ms                                          |  |                 |                                                                                    |
| Basic unit with auxiliary contact module                              |  | g               |                                                                                    |
| N/O contact                                                           |  | g               | 7                                                                                  |
| N/C contact                                                           |  | g               | 5                                                                                  |
| Degree of Protection                                                  |  |                 | IP20                                                                               |
| Protection against direct contact when actuated from front (EN 50274) |  |                 | Finger and back-of-hand proof                                                      |
| Weight                                                                |  | kg              | 0.05                                                                               |
| Terminal capacities                                                   |  | mm <sup>2</sup> |                                                                                    |
| Push-in terminals                                                     |  |                 |                                                                                    |
| Solid                                                                 |  | mm <sup>2</sup> | 1 x (0,5 - 2,5)<br>2 x (0,5 - 2,5)                                                 |
| flexible                                                              |  | mm <sup>2</sup> | 1 x (0,5 - 2,5)<br>2 x (0,5 - 2,5)                                                 |
| flexible with ferrules                                                |  | mm <sup>2</sup> | 1 x (0,5 - 1,5)<br>2 x (0,5 - 1,5)                                                 |
| flexible with ultrasonic welded busbar end                            |  | mm <sup>2</sup> | 1 x (0,5 - 2,5)<br>2 x (0,5 - 2,5)                                                 |
| flexible with uninsulated wire end ferrule                            |  | mm <sup>2</sup> | 1 x (0,5 - 2,5)<br>2 x (0,5 - 2,5)                                                 |
| Solid or stranded                                                     |  | AWG             | 20 - 14                                                                            |
| Stripping length                                                      |  | mm              | 10                                                                                 |
| Standard screwdriver                                                  |  |                 | 3.0 x 0.5                                                                          |

## Contacts

|                                                                                                 |                  |      |                                                                                 |
|-------------------------------------------------------------------------------------------------|------------------|------|---------------------------------------------------------------------------------|
| Interlocked opposing contacts within an auxiliary contact module (to IEC 60947-5-1 Annex L)     |                  |      | yes                                                                             |
| N/C contact (not late-break contact) suitable as a mirror contact (to IEC/EN 60947-4-1 Annex F) |                  |      | DILM7 - DILM32                                                                  |
| Rated impulse withstand voltage                                                                 | U <sub>imp</sub> | V AC | 6000                                                                            |
| Overvoltage category/pollution degree                                                           |                  |      | III/3                                                                           |
| Rated insulation voltage                                                                        | U <sub>i</sub>   | V AC | 690                                                                             |
| Rated operational voltage                                                                       | U <sub>e</sub>   | V AC | 500                                                                             |
| Safe isolation to EN 61140                                                                      |                  |      |                                                                                 |
| between coil and auxiliary contacts                                                             |                  | V AC | 400                                                                             |
| between the auxiliary contacts                                                                  |                  | V AC | 400                                                                             |
| Rated operational current                                                                       |                  | A    |                                                                                 |
| Conventional free air thermal current, 1 pole                                                   |                  |      |                                                                                 |
| at 60 °C                                                                                        | I <sub>th</sub>  | A    | 16                                                                              |
| AC-15                                                                                           |                  |      |                                                                                 |
| 220 V 230 V 240 V                                                                               | I <sub>e</sub>   | A    | 4                                                                               |
| 380 V 400 V 415 V                                                                               | I <sub>e</sub>   | A    | 4                                                                               |
| 500 V                                                                                           | I <sub>e</sub>   | 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    | 10                                                                              |
| 1                                                                                               | 60 V             | A    | 6                                                                               |
| 2                                                                                               | 60 V             | A    | 10                                                                              |
| 1                                                                                               | 110 V            | A    | 3                                                                               |

|                                                                         |                |         |                                                                                                                                                  |
|-------------------------------------------------------------------------|----------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 3                                                                       | 110 V          | A       | 6                                                                                                                                                |
| 1                                                                       | 220 V          | A       | 1                                                                                                                                                |
| 3                                                                       | 220 V          | A       | 5                                                                                                                                                |
| DC L/R ≤ 50 ms                                                          |                |         |                                                                                                                                                  |
| Contacts in series:                                                     |                | A       |                                                                                                                                                  |
| 3                                                                       | 24 V           | A       | 2.5                                                                                                                                              |
| 3                                                                       | 60 V           | A       | 1                                                                                                                                                |
| 3                                                                       | 110 V          | A       | 0.5                                                                                                                                              |
| 3                                                                       | 220 V          | A       | 0.25                                                                                                                                             |
| DC-13 (6xP)                                                             |                |         |                                                                                                                                                  |
| 24 V                                                                    | I <sub>e</sub> | A       | 2.5                                                                                                                                              |
| 60 V                                                                    | I <sub>e</sub> | A       | 1                                                                                                                                                |
| 110 V                                                                   | I <sub>e</sub> | A       | 0.5                                                                                                                                              |
| 220 V                                                                   | I <sub>e</sub> | A       | 0.25                                                                                                                                             |
| Control circuit reliability                                             | Failure rate   | λ       | <10 <sup>-8</sup> , < one failure at 100 million operations<br>(at U <sub>e</sub> = 24 V DC, U <sub>min</sub> = 17 V, I <sub>min</sub> = 5.4 mA) |
| Short-circuit rating without welding                                    |                |         |                                                                                                                                                  |
| Short-circuit protection maximum fuse                                   |                |         |                                                                                                                                                  |
| 500 V                                                                   |                | A gG/gL | 10                                                                                                                                               |
| Current heat loss at I <sub>th</sub>                                    |                |         |                                                                                                                                                  |
| AC operated                                                             |                | W       | 2.6                                                                                                                                              |
| DC operated                                                             |                | W       | 2.6                                                                                                                                              |
| Current heat loss per auxiliary circuit at I <sub>e</sub> (AC-15/230 V) |                | CO      | 0.16                                                                                                                                             |

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 | 1    |

Design verification as per IEC/EN 61439

|                                        |  |    |     |
|----------------------------------------|--|----|-----|
| Technical data for design verification |  |    |     |
| Operating ambient temperature min.     |  | °C | -25 |
| Operating ambient temperature max.     |  | °C | 60  |

Technical data ETIM 7.0

|                                                                                                                                                                                                                   |  |   |                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---|-------------------------|
| 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<br>(ecI@ss10.0.1-27-37-13-02 [AKN342013]) |  |   |                         |
| Number of contacts as change-over contact                                                                                                                                                                         |  |   | 0                       |
| Number of contacts as normally open contact                                                                                                                                                                       |  |   | 1                       |
| Number of contacts as normally closed contact                                                                                                                                                                     |  |   | 3                       |
| Number of fault-signal switches                                                                                                                                                                                   |  |   | 0                       |
| Rated operation current I <sub>e</sub> at AC-15, 230 V                                                                                                                                                            |  | A | 4                       |
| Type of electric connection                                                                                                                                                                                       |  |   | Spring clamp 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                       |

**Dimensions**

