

## Data sheet

### E-DAT Industry RJ45 field plug insert Cat.6 Class E<sub>A</sub>

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P/N

1401400810-I

EAN 4250184114116

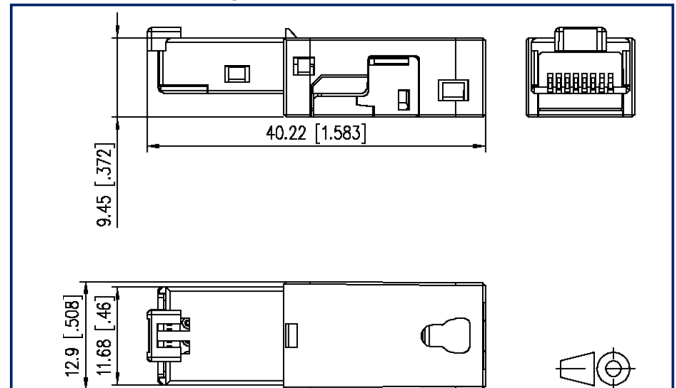
2022/10/11

Version: AP

## Illustrations



Dimensional drawing



See enlarged drawings at the end of document

## Product specification

- Cat.6 class E<sub>A</sub> plug to be assembled in the field and mounted in IP67 plug housings of variants 1, 4, 5 and 14
- compliance with class E<sub>A</sub> to ISO/IEC 11801 Ed.2.2:2011-06, DIN EN 50173-1:2011-09
- suitable for 10 GBit Ethernet (IEEE 802.3an), Remote Powering (PoE, PoE plus, UPoE and 4PPoE) and HDBaseT
- 8-wire RJ45 plug for AWG 22 to be assembled in the field
- connection of AWG 26/7 - 22/7, AWG 26/1 - 22/1 possible
- solid copper wire diameter from 0.4 to 0.64 mm
- stranded copper wire diameter from 0.48 to 0.76 mm
- conductor diameter up to 1.6 mm
- cable jacket from 5.5 to 8.5 mm
- consists of only 2 parts
- easy assembly - connection without special tools
- zinc die-cast housing for industrial use
- can be used as test plug at IP67 end of variants 1, 4, 5, 6 and 14
- variants: T568A, T568B, Industry



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### Technical Data

#### General Data

|   |                                   |
|---|-----------------------------------|
| Fields of application                         | Industrial Ethernet               |
| Mechanical measurement according to MICE      | M1                                |
| Ingress measurement according to MICE         | I1                                |
| Climatic measurement according to MICE        | C1                                |
| Electromagnetic measurement according to MICE | E2                                |
| Design  | plug                              |
| Shielding                                     | shielded                          |
| Transmission technology                       | Copper                            |
| Color   | metallike                         |
| Dimensions                                    |                                   |
| Dimension (L x W x H)                         | 40.22 mm x 12.9 mm x 9.45 mm      |
| Dimension (L x W x H)                         | 1.583 in. x 0.508 in. x 0.372 in. |
| Field assembly ability                        | yes                               |
| Labeling option                               | on housing                        |

#### Transmission characteristics

|                                 |                |
|---------------------------------|----------------|
| Category (ISO)                  | 6              |
| Class (ISO/IEC)                 | E <sub>A</sub> |
| Category (TIA)                  | 6              |
| Remote Powering                 | yes            |
| PoE                             | IEEE 802.3af   |
| PoE plus                        | IEEE 802.3at   |
| UPoE                            | yes            |
| 4PPoE                           | IEEE 802.3bt   |
| HDBaseT                         | yes            |
| Transmission rate up to 10 GBit | IEEE 802.3an   |

#### Connections/interfaces

|  |                |
|--|----------------|
| Connector technology interface 1         | IDC-connection |
| Connector technology interface 2         | RJ45 plug      |
| Number of ports interface 2              | 1              |
| Number of ports interface 2 equipped     | 1              |
| Number of positions/contacts interface 1 | 8              |

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| Connections/interfaces                          |   |
|---|---|
| Number of positions/contacts interface 2        | 8P/8C   |
| Termination data, solid wire (min. - max.)      |   |
| Conductor cross section, solid wire             | AWG 26/1 - AWG 22/1                           |
| Conductor cross section, solid wire             | 0.128 mm <sup>2</sup> - 0.324 mm <sup>2</sup> |
| Conductor diameter, solid wire (bare copper)    | 0.409 mm - 0.643 mm                           |
| Conductor diameter, solid wire (bare copper)    | 0.016 in. - 0.025 in.                         |
| Termination data, stranded wire (min. - max.)   |   |
| Conductor cross section, stranded wire          | AWG 26/7 - AWG 22/7                           |
| Conductor cross section, stranded wire          | 0.141 mm <sup>2</sup> - 0.355 mm <sup>2</sup> |
| Conductor diameter, stranded wire (bare copper) | 0.483 mm - 0.762 mm                           |
| Conductor diameter, stranded wire (bare copper) | 0.019 in. - 0.03 in.                          |
| Aderdurchmesser (min.-max.)                     |   |
| Core diameter (conductor with insulation)       | 0.85 mm - 1.6 mm                              |
| Core diameter (conductor with insulation)       | 0.033 in. - 0.063 in.                         |
| Cable sheath diameter (min. - max.)             |   |
| Cable sheath diameter                           | 5.5 mm - 8.50                                 |
| Cable sheath diameter                           | 0.217 in. - 0.335                             |
| Cable access/outlet                             | 180°  |

| Electrical characteristics                          |                |
|---|----------------|
| Current carrying capacity                           | max. 1 A       |
| Contact resistance                                  | max. 20 mOhm   |
| Insulation resistance                               | min. 500 MOhm  |
| Dielectric strength conductor-conductor (secondary) | min. 1000 V DC |
| Dielectric strength conductor-shield                | min. 1500 V DC |

| Mechanical data                |                  |
|--------------------------------|------------------|
| Mounting method                | snap-in function |
| Insertion and withdrawal force | max. 30 N        |
| Life - Number of mating cycles | min. 750         |
| Strip force (peak)             | 40               |

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#### Materials and material properties

|   |  |
|---|--|
| Material - Housing                                    | GD-Zn (zinc die-cast)  |
| Material - Housing finish                             | copper-nickel (Ni-Cu)  |
| Material - Insulation displacement contacts           | CuSn (tin bronze)  |
| Material - Finish of insulation displacement contacts | Sn (tin)   |
| Material - Contact                                    | CuSn (tin bronze)  |
| Material - Contact finish                             | Ni + Au (nickel-gold)  |
| Material - Shield                                     | Cu-Ni-Zn (nickel silver)   |
| Material - Stuffer cap                                | PA UL94-V0   |
| Material - Strain relief                              | PA UL94-V0   |
| Material - Latch                                      | PA UL94 V0   |
| Halogen free  | yes  |
| Silicone free   | no paint wetting interfering substances (LaBS) in the process chain                    |
| LaBS Note   | subsequent contamination possible due to handling and possible storage in your company |
| Material - Finish                                     | Ni (nickel)  |
| RoHS  | compliant  |
| REACH   | compliant  |

#### Environmental conditions

|                             |  |
|-----------------------------|--|
| Temperature (min. - max.)   |  |
| Temperature - Storage °C    | -40 °C - 70 °C   |
| Temperature - Storage °F    | -40 °F - 158 °F  |
| Temperature - Operating °C  | -40 °C - 70 °C   |
| Temperature - Operating °F  | -40 °F - 158 °F  |
| Particulate ingress         | IP2X   |
| Liquid ingress/immersion    | IPX0   |
| Rapid change of temperature | -40°C / -40°F - +70°C / 158°F / 25 cycles t=30 min                   |
| Damp heat                   | +25°C / +77°F / +65°C / +149°F / 93% RH // -10°C / -14°F / 21 cycles |
| Flowing mixed gas           | +25 °C / +77°F / 73% RH / 4 days, H2S / SO2                          |
| Vibration                   | 50 m/s <sup>2</sup>  |
| Shock                       | 250 m/s <sup>2</sup>   |

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#### Approvals

UL listed (file no.)



DUXR.E178484

#### Standards/Regulations

##### Generic cabling systems

|                      |  |
|----------------------|--|
| General requirements | ANSI/TIA-568-B.2-10  |
| Office buildings     | ISO/IEC 11801 Ed.2.2: 2011-06   DIN EN 50173-2<br>ANSI/TIA-568-C |
| Industrial area      | ISO/IEC 24702   DIN EN 50173-3<br>ANSI/TIA-1005                  |
| Living units         | ISO/IEC 15018   DIN EN 50173-4<br>ANSI/TIA-570-B                 |

##### Application-specific communications cabling systems

|  |         |
|--|---------|
| Profinet   | yes     |
| UL standard for Communications-Circuit Accessories | UL 1863 |

##### Connectors for electronic equipment

|                           |                           |
|---------------------------|---------------------------|
| Free and fixed connectors | DIN EN 60603-7-51:2011-01 |
|---------------------------|---------------------------|

##### Interference proof

|                                      |                          |
|--------------------------------------|--------------------------|
| Immunity for industrial environments | DIN EN 61000-6-2:2006-03 |
|--------------------------------------|--------------------------|

##### Emission proof

|  |                          |
|--|--------------------------|
| Electromagnetic emission for residential, commercial and light-industrial environments | DIN EN 61000-6-3:2011-09 |
|--|--------------------------|

|               |              |
|---------------|--------------|
| Climate tests | IEC 60512-11 |
|---------------|--------------|

#### Classifications

|          |          |
|----------|----------|
| ETIM 5.0 | EC001121 |
| ETIM 6.0 | EC001121 |
| ETIM 7.0 | EC001121 |
| ETIM 8.0 | EC001121 |

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#### Packing details

|                                 |                                    |
|---------------------------------|------------------------------------|
| Type of packaging               | 10 pc(s) / box                     |
| Packaging unit - Weight (gram)  | 213 g                              |
| Packaging unit - Weight (pound) | 0.47 lb                            |
| Packaging dimension             | 258 mm x 164 mm x 51 mm            |
| Packaging dimension             | 10.157 in. x 6.457 in. x 2.008 in. |

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### Accessories from

| P/N          | Designation   |
|--------------|---|
| 1401015000ME | Industry IP67 V1 metal plug housing                                     |
| 1401015002KE | Industry IP67 V1 plug housing   |
| 1401025000ME | Industry IP67 V1 metal plug housing bend protected                      |
| 1401025002KE | Industry IP67 V1 plug housing bend protected                            |
| 1401045002KE | Industry IP67 V4 plug housing   |
| 1401055002KE | Industry IP67 V4 plug housing bend protected                            |
| 1401065000ME | Industry IP67 V5 metal plug housing                                     |
| 14010850C0ME | E-DAT Industry IP67 V14 plug housing for RJ45 unequipped                |
| 14010950C0ME | E-DAT Industry IP67 V14 plug housing bend protected for RJ45 unequipped |



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