

# Technical data

**Rated voltage:** 250 V, 600 V (UL)  
**Rated current:** 20 A  
**Number of poles:** 3 pole (L, N, ground)  
**Regulations:** DIN VDE 0606 T200; VDE 0110  
 IEC 60999: UL 2238; CSA: C22.2  
 No.182.2-M1987;  
 LR Type Approval System  
 pending  
**Approvals:** VDE; UL; CSA; LR; GL; DNV  
**Type of protection:** IP 65, IP 66, IP 67 and IP 68  
 (3 m; 2 hours)  
 Double connection being prepared

**Cable assemblies:** Crimp technology, H05VV-F or H07RN-F

**Conductor cross section:** 1.5 mm<sup>2</sup> and 2.5 mm<sup>2</sup>

**Cable with free end:** Sheath strip length 35 mm,  
 Insulation strip length 9 mm,  
 ultrasonically welded

**Locking device:** Open by using a tool:  
 Press the screwdriver blade into the  
 opening of the locking device and turn  
 90°.

**Material:** Contact material:  
 Brass, surface-plated  
 Housing:  
 Thermoplastic PA 66, halogen-free, V2  
 Sealing material:  
 NBR

**Continuous temperature:** Insulation components 100° C, cable  
 H05VV 70° C,  
 H07RN-F 60° C

**temperature under full load:** Connectors 55° C (depending on  
 the cable and lay-out);  
 Distribution units 40° C

**Glow-wire test 960° C:** For connectors, distribution units, cable  
 assemblies and appliance couplers

**Coding:** Mechanical coding symbolized by color code  
 gray and black with the same mechanical  
 coding. Other codings are optional.

**Note:** Protection against shock generally guaranteed  
 even when disconnected.  
 Ground conductor leading.

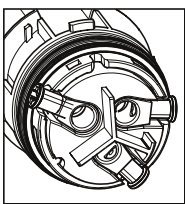
Connection to the live cable must be with a  
 female connector according to the regulations.  
 It is therefore not possible to have a ring  
 circuit arrangement. Only pluggable in the  
 correct pole configuration; 1 pole cannot be  
 connected. Contacts protected against strain  
 on the cable. All components can be  
 interlocked. DIN VDE 0606-200 requires the  
 use of a locking device. Dangerous mismatching  
 with installation connector systems of other  
 suppliers is not automatically excluded by  
 compliance with DIN VDE 0606 T200.  
 Installation connectors do not replace national  
 connector/outlet systems for home  
 applications.

## Ambient operating

### Insulation strip lengths and ferrules

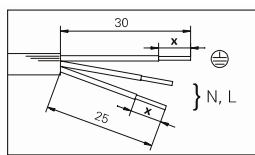
all lengths in mm

#### Screw connection:

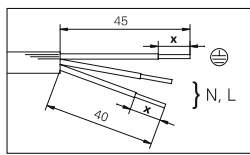


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Connector



Connector, double connection



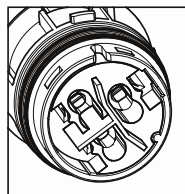
#### Screwdriver

PZ1

Nominal torque: 0.8 – 1.0 Nm

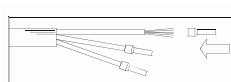
Conductor cross section	0.75 mm <sup>2</sup>	1.0 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	4 mm <sup>2</sup>	AWG 12–18
solid	8	8	8	8	8	–
fine-stranded	8	8	8	8	8	–
stranded	8	8	8	8	8	8
ultrasonically welded	8	8	8	8	8	–

#### Spring connection:

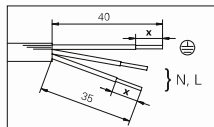


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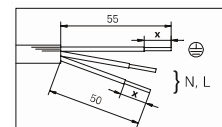
Fine-stranded and stranded wires



Connector and appliance coupler



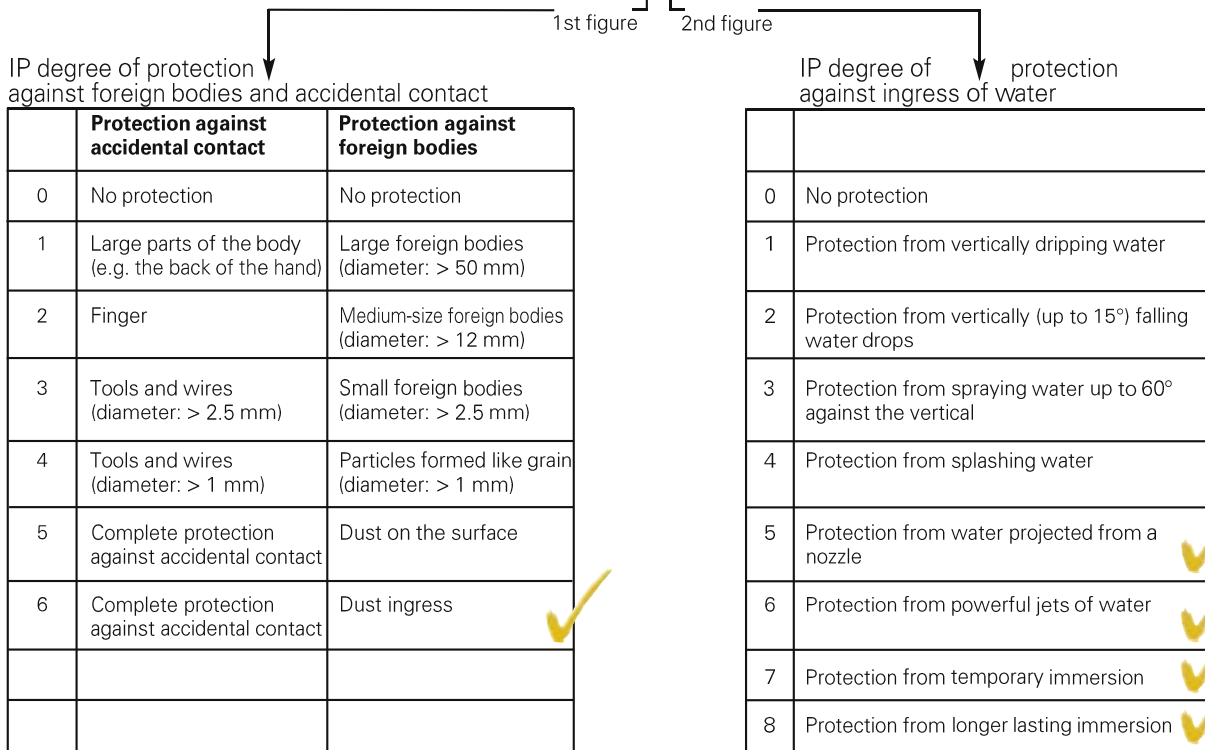
Connector, double connection



Conductor cross section	0.5 mm <sup>2</sup>	0.75 mm <sup>2</sup>	1 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
solid	14.5 + 1	14.5 + 1	14.5 + 1	14.5 + 1	14.5 + 1
fine-stranded	12.0 + 1	13.0 + 1	13.0 + 1	13.0 + 1	
Ferrule accord. to DIN	46228-E0,5-10	46228-E0,75-12	46228-E1,0-12	46228-E1,5-12	
stranded		13.0 + 1	13.0 + 1	13.0 + 1	
Ferrule accord. to DIN		46228-E0,75-12	46228-E1,0-12	46228-E1,5-12	
ultrasonically welded				14,5 + 1	14.5 + 1

**IP protection degrees:**

**Example: IP 65**



In many applications, electrical devices and systems must work safely for many years under difficult environmental conditions. For a reliable function, water or foreign particles (such as dust, oil, soot) ingress into production systems, parking garages or outer premises must be avoided. The requirements for IP protection vary from application to application and must be defined accordingly by the user.

**For protection degree IP 68, the secondary conditions must be explicitly listed by the manufacturer (at least 1.50 m and 30 minutes). In this case, manufacturer and user have to agree on the conditions.**

**Material resistance** for PA 66 (housing) and NBR (sealing)

Please contact us for applications under different conditions.		
UV light (use black-colored connectors)	+	Motor oil (SAE 20W/55)
Resistance to oil and grease	+	Nickel chloride
Aliphatic carbon hydride	+	Paraffin and paraffin derivates
Aromatic carbon hydrides	+	Phosphoric ester
Alcohol	+	Phthalic ester
Ammonia, water-free	+	Polyamide resin
Ammonium chloride (salmiac)	+	Polyester polyoles
Ammonium sulfate	+	Polyether polyoles
Barium chloride	+	Polyglycols
Beer	+	Polymeric softeners
Butter	+	Polyurethane resins
Butyl alcohol	+	Mercury
Calcium chloride, hydrous solution, 10%	+	Castor oil
Citric acid, hydrous solution, 10%	+	Salmiac
Ferric sulfide	+	Oxygen, RT
Ethyl ether	+	Lubricating oil (O-149), (not bunker fuel, oil tanker)
Paint, varnish, not much sulfuric acid	+	Sulfur, wet
Fruit juice, fruit acid	+	Sulfuric acid (verd, RT)
Tannic acid	+	Sulfur hexafluoride
Glycerin	+	Sweat
Glystantine, hydrous solution, 40%	+	Sebacic acid ester
Potassium chloride	+	Spirit
Caustic potash solution, hydrous solution, 10%	+	Nitric acid (10%)
Sodium, hydrous solution, 10%	+	Hydrochloric acid (10%)
Linseed oil	+	Water, RT, free from chlorine up to 80°
Milk	+	Water: salt water resistance, artificial, 20°C
Lactic acid, 20°C	+	Stannic chloride, 20°C, saturated

