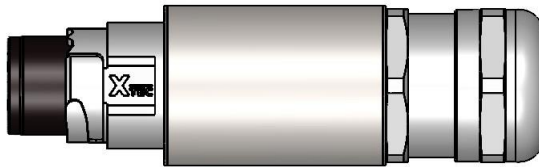


1 Datasheet X-TEC 15M HAND-MOUNTING-male 7-12 MM



source

destination


2 Application

Connection of 3-phase consumers with 2 Signalpins

3 General component properties

3.1 Cataloguing

DESIGNATION	VALUE	UNIT
product designation of manufacturer	X-TEC 15 Accessories	
Manufacturer Article Number	1160886	
Application standards	PERFORMANCE	
UL Mark	UL Listed	
eCl@ss 9.0	27-44-03-90	
country of origin	DE	

08.11.2023-RSP	Adaptation Eclass	8.0		UL- Identification	Order no.	
26.10.2023-RSP	Adaptation Eclass	7.0		W-TEC 15M-KCS-XXX-61414-12-AS	1160886-00000	
24.08.2023-RSP	Rated current main wires *	6.0		Designation	Datasheet	
08.08.2023-RSP	New: IEC 61076-2-116	5.0		X-TEC 15M HAND-MOUNTING-male	Created	Page
Change No.	Description of changes	Index		7-12 MM	09.11.2023-RSP	1

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3.2 Electrical properties

DESIGNATION	VALUE	UNIT
rated current	16	A
Rated current auxiliary wires	10	A
rated voltage	600	V AC
Rated voltage auxiliary wires	250	V AC / DC
rated impulse voltage	6	kV
shielded	Yes	
protective conductor connection	according to VDE 0627	
Overvoltage category according to DIN EN 60664-1	3	
Plugging under voltage according to DIN EN 61984	No	
degree of contamination	3	
protective conductors	yes (PE) 1,2mm leading	
neutral conductor	No	
Degree of protection by encapsulation according to IEC 60529	No	
Reference to standard	DIN EN 61984 / IEC 61076-2-116	

If the plug connection is disconnected for an indefinite period of time from a exposed to industrial atmospheres, the contact chamber is equipped with a cover cap to protect against pollution.

*To determine max. load currents, deratings for used connection conductor cross-sections as well as reduction factors for conductors, cables and lines in the electrical equipment of machines according to DIN EN 60204-1 must be taken into account.

3.3 Weights


DESIGNATION	VALUE	UNIT
Connector Source	99	g

3.4 Approval

DESIGNATION	VALUE	UNIT
UL.CCN **	PVVA.E486020	
CSA.CCN **	PVVA7.E486020	
CCC	No	
GOST-R	No	
CE Nomenclature	X-TEC 15M-KXX-XXX-XXXXX-KK-AS	

3.4.1 Approvals Supplements

** Suitable For Use On a Circuit Capable Of Delivering Not More Than 5,000 rms Symmetrical Amperes, 600V Maximum.
When Protected by Time Delay (See Table Below) Class Fuses:

08.11.2023-RSP	Adaptation Eclass	8.0		UL- Identification	Order no.	
26.10.2023-RSP	Adaptation Eclass	7.0		W-TEC 15M-KCS-XXX-61414-12-AS	1160886-00000	
24.08.2023-RSP	Rated current main wires *	6.0		Designation	Datasheet	
08.08.2023-RSP	New: IEC 61076-2-116	5.0		X-TEC 15M HAND-MOUNTING-male	Created	Page
Change No.	Description of changes	Index		7-12 MM	09.11.2023-RSP	2

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Cat. No(s).	Time Delay (TD) /Non-time delay (NTD)	Fuse Class	Fuse Current Rating (A)	SCCR (kA)	Voltage V AC
All rated 13 A	TD	RK5	25	5	600
	TD	J	60	50	600
	TD	CC	30	50	600
All rated 16 A	TD	RK5	35	5	600
	TD	J	60	50	600
	TD	CC	30	50	600

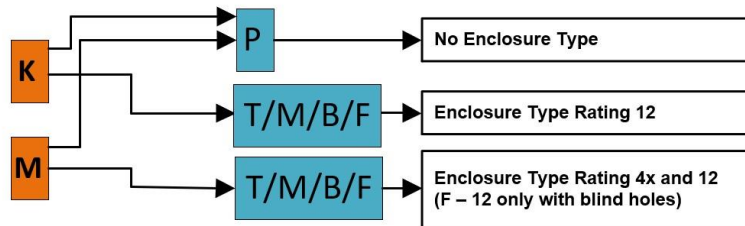
Suitable For Use On A Circuit Capable Of Delivering Not More Than 50kA rms Symmetrical Amperes, 480 Vac Maximum, When Protcted By A Circuit Breaker Rated Not More Than 16A, Having An Interrupting Rating Not Less Than 50kA rms Symmetrical Amperes, 480Vac Maximum.

Circuit Breakers:

Cat. No(s).	Model/Type	Manufacturer / UL File	Current Rating (A)	SCCR (kA)	Voltage V AC
All	Any	Any / Any	16	50	480Y/277 Vac

3.4.2 Enclosure Type Rating


X - T E C 1 5 - - - X X X ...



X - T E C 1 5 - X X X - - - ...

3.5 Thermal properties

DESIGNATION	VALUE	UNIT
Max. operating temperature	70	°C
Fixed temperature range (LLT-ULT)	-35 ... +70	°C

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24.08.2023-RSP	Rated current main wires *	6.0		Designation	Datasheet
08.08.2023-RSP	New: IEC 61076-2-116	5.0		X-TEC 15M HAND-MOUNTING-male 7-12 MM	Created
Change No.	Description of changes	Index		09.11.2023-RSP	3

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3.6 UL Ratings

DESIGNATION	VALUE	UNIT
Reference to UL standard	2237	
max. connectable conductor size (AWG/KCMIL)	16-14	AWG
Auxiliary wires Wire gauge	16-14	AWG
Enclosure Type Rating	4X, 12	
flame-resistant (in accordance with UL94)	HB	

3.7 Other features

DESIGNATION	VALUE	UNIT
RoHS compliant	2011/65/EU	
REACH SVHC substances	-	
halogen-free	Yes	
oil and grease resistant	Yes	
flame-resistant	Yes	

The material of the housing-encapsulation is plastic and has a good resistance to chemicals and oil. If aggressive media are used, the material resistance must be checked in relation to the application. Further details on request.

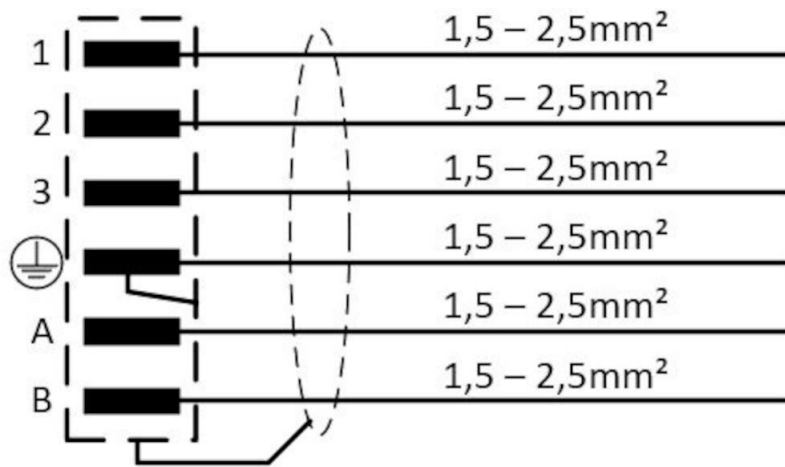
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26.10.2023-RSP	Adaptation Eclass	7.0		W-TEC 15M-KCS-XXX-61414-12-AS	1160886-00000	
24.08.2023-RSP	Rated current main wires *	6.0		Designation	Datasheet	
08.08.2023-RSP	New: IEC 61076-2-116	5.0		X-TEC 15M HAND-MOUNTING-male	Created	Page
Change No.	Description of changes	Index		7-12 MM	09.11.2023-RSP	4


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4 General structure

4.1 Allocation plan



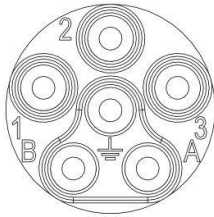
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26.10.2023-RSP	Adaptation Eclass	7.0		W-TEC 15M-KCS-XXX-61414-12-AS	1160886-00000	
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Change No.	Description of changes	Index		7-12 MM	09.11.2023-RSP	5

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5 Construction Source

5.1 Pole diagram Source



5.2 Construction Source

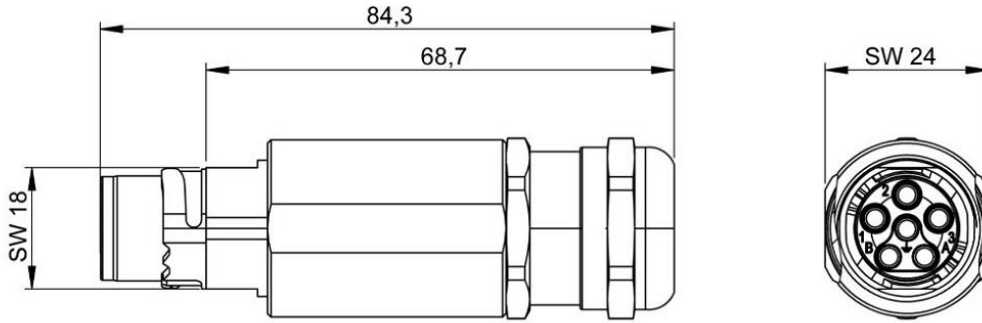
DESIGNATION	VALUE	UNIT
Size of construction	X-TEC 15	
Type of interlock	Quick release fastener	
Execution	free plug-in pin	
Number of poles	6	
Construction form of the plug connector	straight	
clamping area	7 - 12	mm
Material Seals	NBR, FPM	
production type	mounted	
material of housing	NiRo Steel, zinc, brass, nickel-plated	
Material Insulating body	PA 6.6	
Conductor connection method	Crimp connection	
Material Contacts	Copper alloy, hard silver plated	
contact resistance	<3	mOhm
Mechanical life Contacts	500	mating cycles
connectable wires	fine to finely stranded	
Degree of protection (IP), mounted	IP65	


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Change No.	Description of changes	Index		7-12 MM	09.11.2023-RSP	6

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5.3 Schematic diagram Source

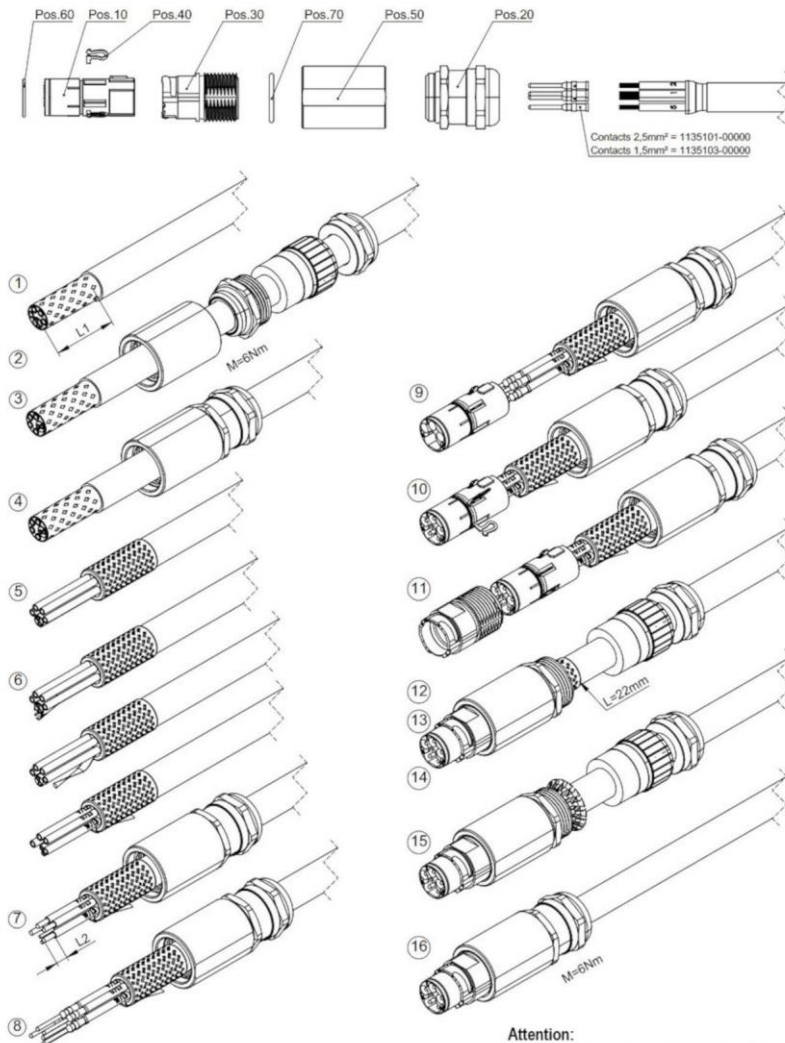


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08.08.2023-RSP	New: IEC 61076-2-116	5.0		X-TEC 15M HAND-MOUNTING-male	Created	Page
Change No.	Description of changes	Index		7-12 MM	09.11.2023-RSP	7

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6 Assembly instructions



Attention:
In case of dismantling the contacts (particularly PE)
-> disassemble positions 10; 30 & 40 in advance!

- !Please ensure that the O-rings are fitted in the correct position!
- ① Remove cable sheath $L1 = 50 \pm 1\text{mm}$ (for cable: $4 \times 2,5$ & $2 \times 1,5$)
 - ② Remove taped wrapping-, core and filler elements
 - ③ Fit Pos.50 and Pos.20 together
 - ④ Screw Pos.20 into Pos.50
 - ⑤ Turn the external shield braiding upside down towards the rear. (Do not untwist the shield)
 - ⑥ Untwist the internal shield and put it along the external shield to the rear.
 - ⑦ Shorten the strand ends accordingly and strip them $L2 = 8\text{mm}$ (for $1,5\text{mm}^2$) and 6mm (for $2,5\text{mm}^2$) / (PE 2mm longer than the other conductors)
 - ⑧ Crimp contacts -> crimping tool LQ order no.: 1148172-00000
 - ⑨ Guide contacts into Pos.10 and engage (Note contact assignment/numbering)
 - ⑩ Insert Pos.40 (Note alignment of PE springs)
 - ⑪ Lock Pos.30 to Pos.10 (Note alignment)
 - ⑫ Screw Pos.50 to Pos.30 (Screw Pos.50 to the stop)
 - ⑬ Screw intermediate piece (part of Pos.20) individually into Pos.50
 - ⑭ Push clamping insert forwards (part of Pos.20) and pull on shield braiding
 - ⑮ Untwist shield and cut to length of 22mm
-> Then insert the clamping insert in the intermediate piece
 - ⑯ Screw all components together -> Note sequence and torques

Cord - R/C (AVLV2) and CAN, 14 or 16 AWG with 4 or 6 stranded Copper conductors crimped to Contacts/Pins (Item 3), rated minimum 80 deg. C, 600 V, as outlined in table under Item 1 above. Jackets and AWM styles as in the table below:

Cat. No.	Jacket material	AWM Style
X-TEC 15M ...-T...	TPU	21223 (+)

Note:
(+) any other AWM style allowed for use as external interconnection with jacket material made of TPU or PUR rated minimum 80 deg. C, 600 V can be used;

The following cord diameters apply for all Cat. No. using suffix "A" in position IV or VII (see Nomenclature for details)

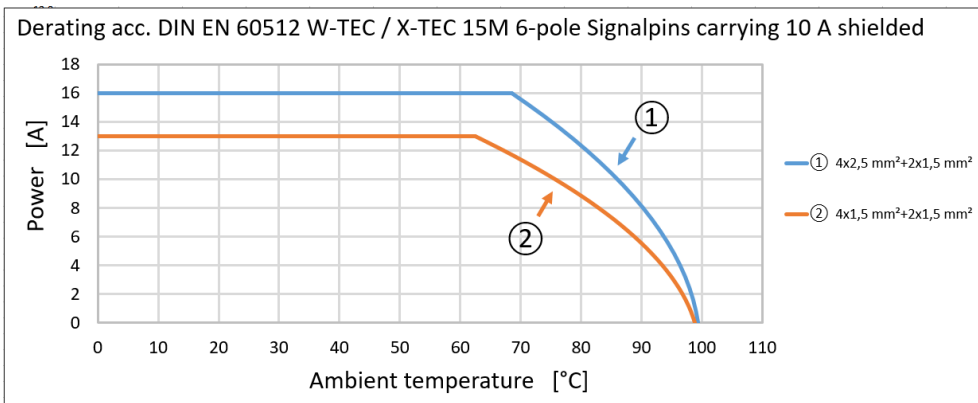
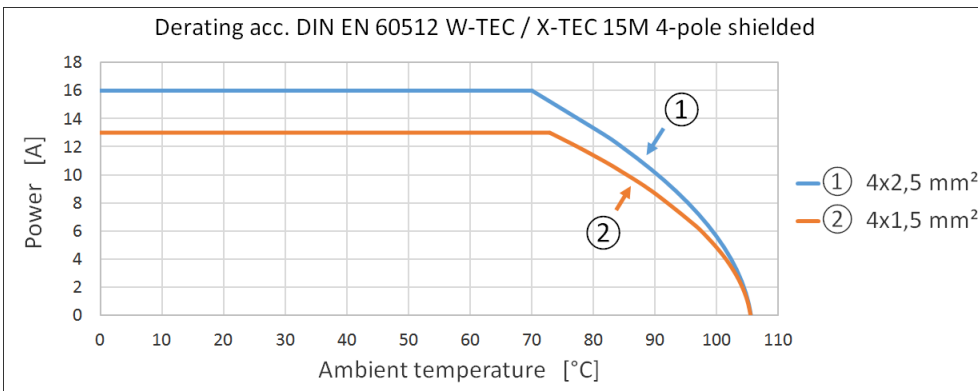
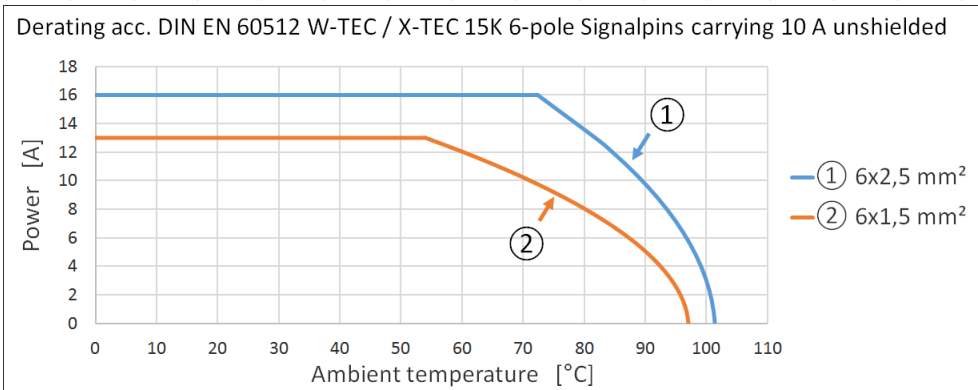
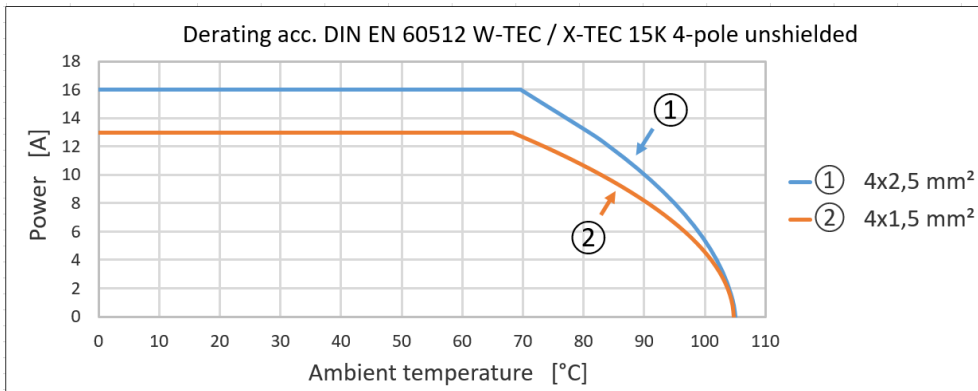
Cat. No.	clamping range/cord diameters	measuring unit
X-TEC 15M ...-12T	8 - 11,6	mm
X-TEC 15M ...-14T	10,1 - 13,9	mm


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08.08.2023-RSP	New: IEC 61076-2-116	5.0		X-TEC 15M HAND-MOUNTING-male	Created	Page
Change No.	Description of changes	Index		7-12 MM	09.11.2023-RSP	8

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7 Derating



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Change No.	Description of changes	Index		7-12 MM	09.11.2023-RSP	9

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8 Appendix Nomenclature

X - T E C 1 5 K - P C S - X X X - 6 1 4 1 4 - X X - W X -

Family designation

- X-TEC
 - Panel mounted connectors
 - Power distribution box

Connector Size

- 15
- 12

Connector type

- K – plastic connector
- M – metal connector

Male/Female contactor type

- T – threaded body
- F – rectangular flange
- P – threaded body including plastic coupling nut
- M – threaded body including metallic coupling nut
- B – threaded body including reducing bush
- C – T-Splitter (one inlet)
- D – 4-way splitter, with top-gated outlets (four outlets)
- E – 4-way splitter, with side-gated outlets (four outlets)
- X – No male/female connector
- K – threaded body including screwed coupling and cable gland (field-assembled construction)

Male/Female contact type

- C – crimp
- X – No male/female connector
- T – No Male/female connector, additional terminal/ferrule crimped to wire ends, resistance welded wire ends, single wire lengths may be varying (Female Panel mounted)

Male/Female contact plating

- S – Silver
- X – No male/female connector

Cable Screen

- X – stranded copper conductors not shielded

Cable Type

- W – stranded copper conductors

Cable gland size

- XX – no cable gland

Signal contact terminal cross-section

- 14 – AWG 14
- 16 – AWG 16
- XX – no signal contacts

Power contact terminal cross-section

- 14 – AWG 14
- 16 – AWG 16

Number of poles

- 4 – 4 poles
- 6 – 6 poles

1 1 2 4 2 7 8 - 0 0 0 1 4

internal description, where xxxxxxx can be 7 digit alphanumeric


internal description, where xxxxxxx can be 7 digit alphanumeric

- Ferrules with insulating collar
- Uninsulated ferrules
- Terminal Connectors,
- **Uninsulated Terminal Connectors,**
- dust caps

and additional features which may be

- welded/compacted stranded wire ends
- additional stripping of wire
- additional stripping of cord isolation
- length difference between power, ground and signal wires

five digit number describing cable length in cm

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Change No.	Description of changes	Index		7-12 MM	09.11.2023-RSP	10

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