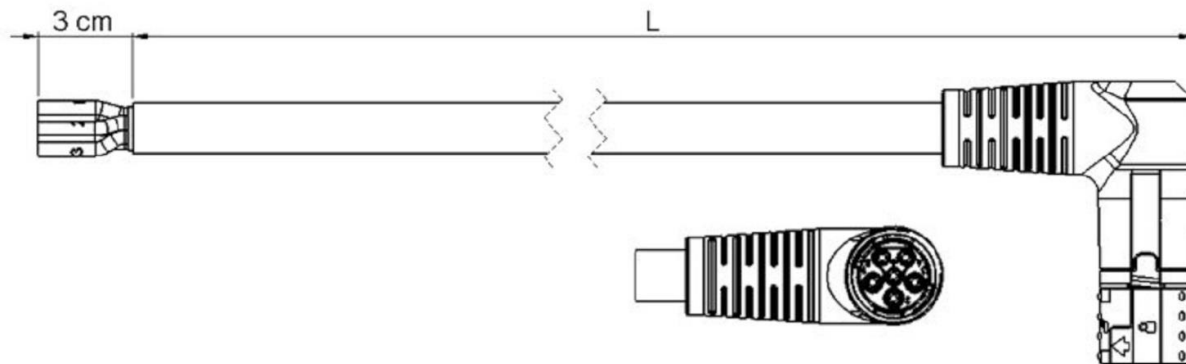


# 1 Datasheet W-TEC 15M SMOOTH/FEMALE-90°L 4x2,5+2x1,5 DA4



source

destination

xxxxx (see order no:) stands for the length in cm.

The stripped cores of our W-TEC 15 standard assemblies with open cable ends are test cores that are not intended for customer use.


## 2 Application

Cable for the connection of asynchronous motors and 3-phase consumer's with 2 Signalpins

## 3 General component properties

### 3.1 Cataloguing

DESIGNATION	VALUE	UNIT
manufacturer brand name	W-TEC 15	
Original Manufacturer No.	1135030	
UL Mark	UL Listed	
eCl@ss 9.0	27-06-04-90	
country of origin	DE	

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### 3.2 Electrical properties


DESIGNATION	VALUE	UNIT
Rated current main wires *	16	A
Rated current auxiliary wires	10	A
Rated voltage main wires	600	V AC
Rated voltage auxiliary wires	250	V AC / DC
rated impulse voltage	6	kV
shield	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)	
neutral conductor	NO	
Degree of protection by encapsulation according to IEC 60529	NO	
Reference to standard	DIN EN 61984	

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
Electrical connection	290	g/m
Connector Target	42	g

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### 3.4 Approval

DESIGNATION	VALUE	UNIT
UL.CCN **	PVVA.E486020	
CSA.CCN **	PVVA7.E486020	
CCC	NO	
GOST-R	NO	
CE Nomenclature	W-TEC 15M-XXX-LCS-61416-XX-TS	

#### 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:

Cat. No(s).	Time Delay (TD) /Non-time delay (NTD)	Fuse Class	Fuse Current Rating (A)	SCCR (kA)	Voltage V AC
<b>All rated 13 A</b>	TD	RK5	25	5	600
	TD	J	60	50	600
	TD	CC	30	50	600
<b>All rated 16 A</b>	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
<b>All</b>	Any	Any / Any	16	50	480Y/277 Vac

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### 3.5 Thermal properties

DESIGNATION	VALUE	UNIT
Temperature range moving (LLT-ULT)	-20 ... 60	°C
Fixed temperature range (LLT-ULT)	-35 ... 70	°C


### 3.6 UL Ratings

DESIGNATION	VALUE	UNIT
Reference to UL standard	2237	
main conductors wire gauge	14	AWG
Auxiliary wires Wire gauge	16	AWG
Encl. Type (UL 50/CSA C22.2 NO.94.1-15)	4X, 12	
Flame resist. of the plug head (UL 94)	HB	
AWM Style of cable	21223	

### 3.7 Other features

DESIGNATION	VALUE	UNIT
RoHS compliant	2011/65/EU under exception III 6c	
REACH SVHC substances	Lead (CAS 7439-92-1, EC 231-100-4)	
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.

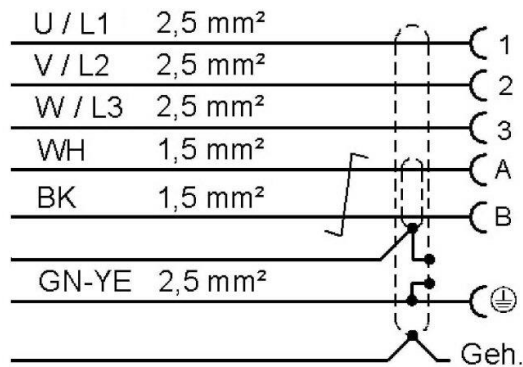
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## 4 General structure

### 4.1 Allocation plan




### 4.2 Cable

#### 4.2.1 Cable construction

DESIGNATION	VALUE	UNIT
Main wires number	4	
main conductors wire gauge	2,5	mm <sup>2</sup>
max. main core diameter incl. insulation D	3	mm
Auxiliary wires Number	2	
Auxiliary wires Wire gauge	1,5	mm <sup>2</sup>
max. auxiliary core diameter incl. insulation D	2,4	mm
outer shield	Yes	
optical coverage outer screen	80	%
internal shield	Yes	
optical covering inner shield	70	%
coat colour	orange RAL 2003	
coat material	PUR	
coat colour main wires	black/green-yellow	
coat colour auxiliary wires	black/white	
Identification of main wires	consecutive number imprint (1-3)	
Identification of auxiliary wires	coloured	
Core insulation material	TPM	
Outside diameter (d) see dimensioned drawing	12,9 +-0,4	mm
insulation resistance	>= 1000	MΩ/km

#### 4.2.2 Mechanical properties


DESIGNATION	VALUE	UNIT
installation type	flexible	
dynamic value	DA4	

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Minimum bending radius moves	10	xD mm
Minimum bending radius fixed	5	xD mm
Max. permissible torsion stress	± 15	°/m

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## 5 Construction Destination

### 5.1 Pole diagram Target




### 5.2 Construction Destination

DESIGNATION	VALUE	UNIT
Size of construction	X-TEC 15	
locking type	Quick release fastener	
EXECUTION	free plug-in socket	
NUMBER OF POLES	6	
type of construction	gewinkelt 90° L	
Material Seals	NBR	
production type	overmoulded	
Housing material	Technomelt	
Material Insulating body	PA 6.6	
Type of connections	Crimp connection	
Material Contacts	Copper alloy, hard silver plated	
contact resistance	<3	mOhm
Mechanical life Contacts	500	mating cycles
TYPE OF PROTECTION	IP66/67	

### 5.3 Space requirement target

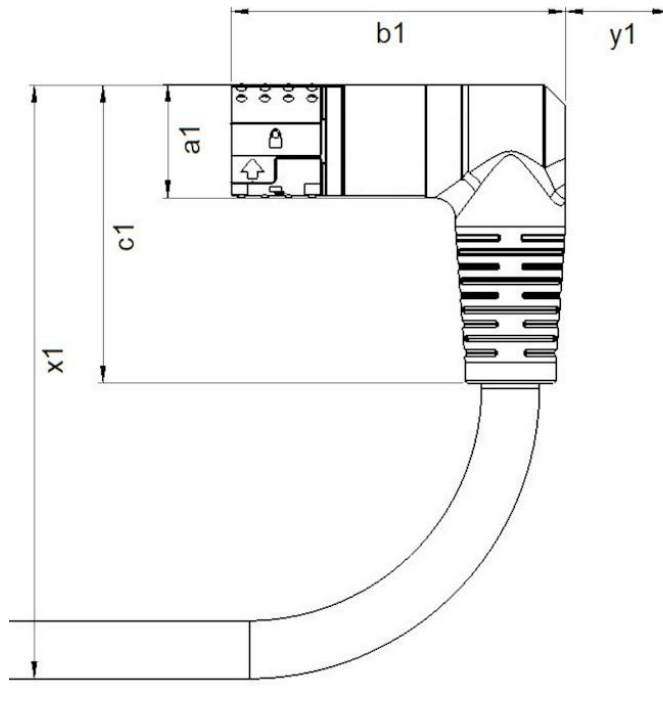
DESIGNATION	VALUE	UNIT
(a1) max. plug diameter	22	mm
(b1) Plug length	63	mm
(c1) Plug width	57	mm
(x1) in mated condition	189	mm
(y1) additional distance to interfering contour plugged in	18	mm


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## 5.4 Schematic diagram Target



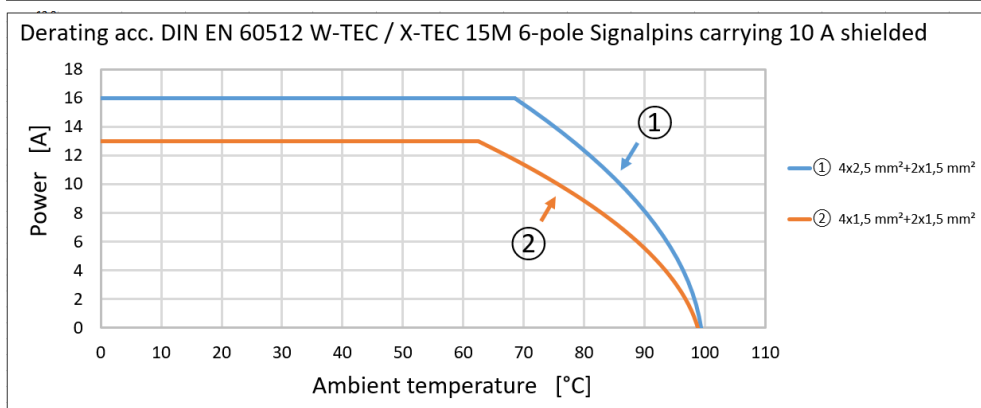
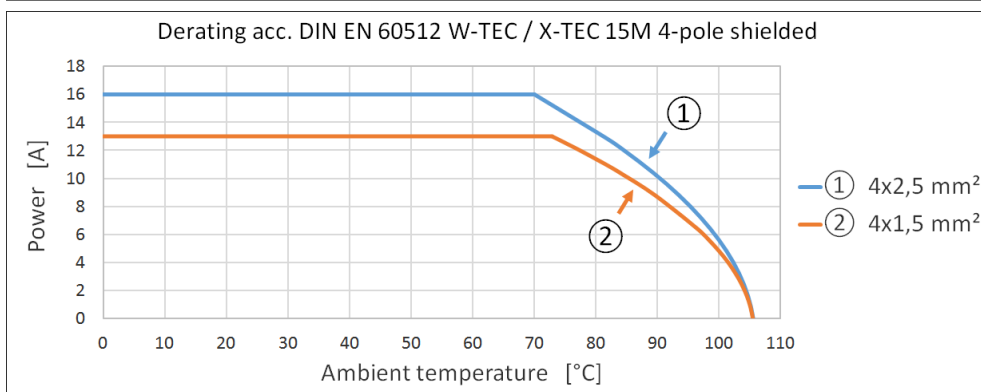
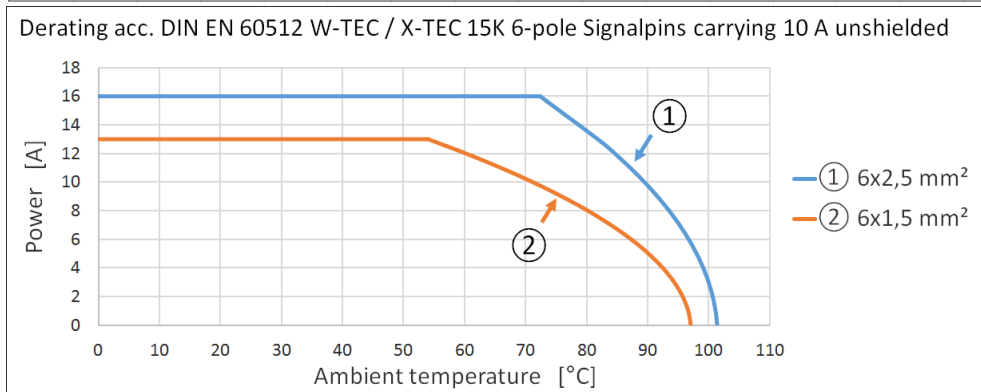
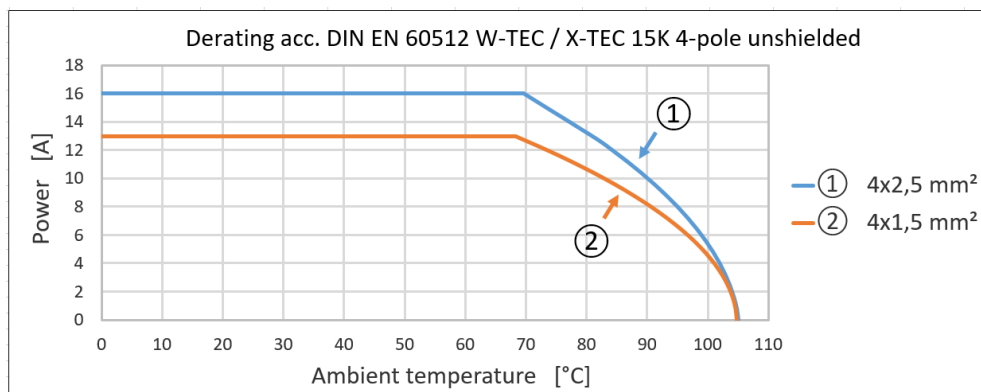
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## 6 Derating



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UL- Identification

W-TEC 15M-XXX-LCS-61416-XX-TS

Designation

W-TEC 15M SMOOTH/FEMALE-90°L  
4x2,5+2x1,5 DA4

Order no.

1135030-xxxxx

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## 7 Appendix Nomenclature

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

### Family designation

- W-TEC
  - Cable Assemblies
  - Cable Fittings

### Connector Size

- 15
- 12

### Connector type

- K – plastic connector
- M – metal connector

### Male/Female contactor type

- G – straight
- F – angled left
- R – Angled right
- X – No male/female connector

### 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

- S – shielded cable
- X – cable not shielded

### Cable Type

- T – TPU
- P – PVC (applicable for cable not shielded variants only)

### 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 1 9 8 8 7 - 0 0 1 0 0

### internal description, where xxxxxx can be 7 digit alphanumeric


internal description, where xxxxxx 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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