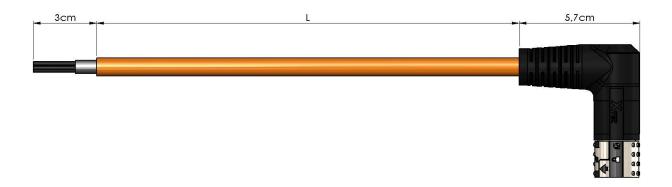
1 Datasheet W-TEC 15M SMOOTH/FEMALE-90°R 4x2,5 DA4



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

3 General component properties

3.1 Cataloguing

| DESIGNATION | VALUE | UNIT |
|-------------------------------------|-------------|------|
| product designation of manufacturer | W-TEC 15 | |
| MANUFACTURER ARTICLE NUMBER | 1135024 | |
| Product utilization of the cable | PERFORMANCE | |
| UL Mark | UL Listed | |
| eCl@ss 9.0 | 27-06-04-90 | |
| country of origin | DE | |

| 27.10.2023-RSP | Adaptation Eclass | 7.0 |
|----------------|------------------------|-------|
| 24.07.2023-RSP | New: IEC 61076-2-116 | 6.0 |
| 24.11.2022-RSP | Service approval | 5.0 |
| 23.08.2021-ROS | Service approval | 4.0 |
| Change No. | Description of changes | Index |



| UL- Identification | Order no. |
|-------------------------------|----------------|
| W-TEC 15M-XXX-RCS-414XX-XX-TS | 1135024-xxxxx |
| Designation | Datasheet |
| W-TEC 15M SMOOTH/FEMALE-90°R | Created |
| 4x2,5 DA4 | 27.10.2023-RSP |
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3.2 Electrical properties

| DESIGNATION | VALUE | UNIT |
|--|--------------------------------|------|
| Rated value of current | 16 | Α |
| rated voltage | 600 | V AC |
| rated impulse voltage | 6 | kV |
| shield | Yes | |
| Design of ground wire | 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 | |
| earthed conductor present | yes (PE) | |
| neutral conductor | No | |
| Degree of protection by encapsulation according to IEC 60529 | No | |
| Application standards | 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 |
|------------------|-------|------|
| Connection 1 | 196 | g/m |
| Connector Target | 40 | g |

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-RCS-414XX-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:

| 27.10.2023-RSP | Adaptation Eclass | 7.0 | | UL- Identification | Order no. |
|----------------|------------------------|-------|----------|-------------------------------|----------------|
| 24.07.2023-RSP | New: IEC 61076-2-116 | 6.0 | | W-TEC 15M-XXX-RCS-414XX-XX-TS | 1135024-xxxxx |
| 24.11.2022-RSP | Service approval | 5.0 | | Designation | Datasheet |
| 23.08.2021-ROS | Service approval | 4.0 | LQ GROUP | W-TEC 15M SMOOTH/FEMALE-90°R | Created |
| Change No. | Description of changes | Index | | 4x2,5 DA4 | 27.10.2023-RSP |

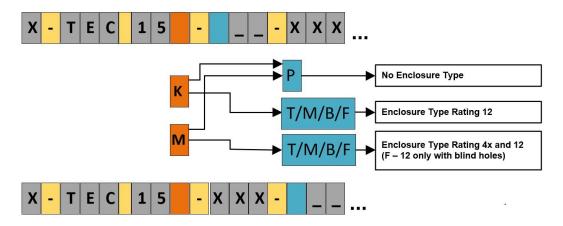
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| Cat. No(s). | Time Delay (TD) /Non-time delay (NTD) | Fuse Class | Fuse Current Rating (A) | SCCR (kA) | Voltage V AC |
|----------------|---|---------------|----------------------------------|--------------|-----------------|
| All rated 13 A | 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 | СС | 30 | 50 | 600 |

Suitable For Use On A Circuit Capable Of Delivering Not More Than 50kA rms Symmetrical Amperes, 480 Vac Maximum, When Proteted 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 | | | Voltage V AC |
|-------------|------------|------------------------|----|----|-----------------|
| All | Any | Any / Any | 16 | 50 | 480Y/277 Vac |



3.5 Thermal properties

| DESIGNATION | VALUE | UNIT |
|---|-------|------|
| min. permissible cable outside temperature, when moving | -20 | °C |
| max. permissible cable outside temperature, when moving | 60 | °C |
| min. permissible cable outside temperature, fixed laid | -35 | °C |
| max. permissible cable outside temperature, fixed laid | 70 | °C |

| 27.10.2023-RSP | Adaptation Eclass | 7.0 |
|----------------|------------------------|-------|
| 24.07.2023-RSP | New: IEC 61076-2-116 | 6.0 |
| 24.11.2022-RSP | Service approval | 5.0 |
| 23.08.2021-ROS | Service approval | 4.0 |
| Change No. | Description of changes | Index |



| UL- Identification | Order no. |
|-------------------------------|------------|
| W-TEC 15M-XXX-RCS-414XX-XX-TS | 1135024-x |
| Designation | Datashe |
| W-TEC 15M SMOOTH/FEMALE-90°R | Created |
| 4x2,5 DA4 | 27.10.2023 |

3.6 UL Ratings

| DESIGNATION | VALUE | UNIT |
|--|--------|------|
| Reference to UL standard | 2237 | |
| cross section of the wire (AWG) | 14 | AWG |
| Encl. Type (UL 50/CSA C22.2 NO.94.1-15) | 4X, 12 | |
| Flame resist. of the plug head (UL 94) | НВ | |
| 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-resistant in accordance EN 60811-2-1 | 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.

| Change No. | Description of changes | Index |
|----------------|------------------------|-------|
| 23.08.2021-ROS | Service approval | 4.0 |
| 24.11.2022-RSP | Service approval | 5.0 |
| 24.07.2023-RSP | New: IEC 61076-2-116 | 6.0 |
| 27.10.2023-RSP | Adaptation Eclass | 7.0 |



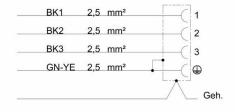
| UL- Identification | Order no. |
|-------------------------------|----------------|
| W-TEC 15M-XXX-RCS-414XX-XX-TS | 1135024-xxxxx |
| Designation | Datasheet |
| W-TEC 15M SMOOTH/FEMALE-90°R | Created |
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4 General structure

4.1 Allocation plan



4.2 Cable

4.2.1 Cable construction

| DESIGNATION | VALUE | UNIT |
|--|----------------------------------|---------|
| Structure Line | 4 x 2,5mm ² | |
| Number of wires | 4 | |
| conductor cross-section | 2,5 | mm² |
| max. main core diameter incl. insulation D | 3 | mm |
| outer shield | Yes | |
| optical coverage outer | 85 | % |
| screen | | |
| internal shield | No | |
| color of the outer sheath | orange RAL 2003 | |
| material of the sheath | PUR | |
| coat colour main wires | black/green-yellow | |
| Identification of main wires | consecutive number imprint (1-3) | |
| Core insulation material | TPM | |
| outside diameter | 10,2 ±0,4 | mm |
| insulation resistance | >= 1000 | MOhm/km |

4.2.2 Mechanical properties

| DESIGNATION | VALUE | UNIT |
|---------------------------------|----------|-------|
| installation type | flexible | |
| dynamic value | DA4 | |
| Minimum bending radius moves | 8 | xD mm |
| Minimum bending radius fixed | 4 | xD mm |
| Max. permissible torsion stress | ± 30 | °/m |

| 27.10.2023-RSP | Adaptation Eclass | 7.0 |
|----------------|------------------------|-------|
| 24.07.2023-RSP | New: IEC 61076-2-116 | 6.0 |
| 24.11.2022-RSP | Service approval | 5.0 |
| 23.08.2021-ROS | Service approval | 4.0 |
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| | UL- Identification | Order no. | |
|----|-------------------------------|----------------|----|
| | W-TEC 15M-XXX-RCS-414XX-XX-TS | 1135024-xxxxx | |
| | Designation | Datasheet | |
| | W-TEC 15M SMOOTH/FEMALE-90°R | Created | Pa |
| | 4x2,5 DA4 | 27.10.2023-RSP | |
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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 | |
| Type of plug-in contact (head 2) | free plug-in socket | |
| Number of poles | 4 | |
| arrangement of the cable lead-in (head 2) | angled 90° R | |
| Material Seals | NBR | |
| production type | overmoulded | |
| Housing material | Technomelt | |
| Material Insulating body | PA 6.6 | |
| Design of the electrical connection (head 2) | Crimp connection | |
| Material Contacts | Copper alloy, hard silver plated | |
| contact resistance | <3 | mOhm |
| Mechanical life Contacts | 500 | mating cycles |
| degree of protection | IP66/67 | |

| 27.10.2023-RSP | Adaptation Eclass | 7.0 |
|----------------|------------------------|-------|
| 24.07.2023-RSP | New: IEC 61076-2-116 | 6.0 |
| 24.11.2022-RSP | Service approval | 5.0 |
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| UL- Identification | Order no. |
|-------------------------------|----------------|
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| Designation | Datasheet |
| W-TEC 15M SMOOTH/FEMALE-90°R | Created |
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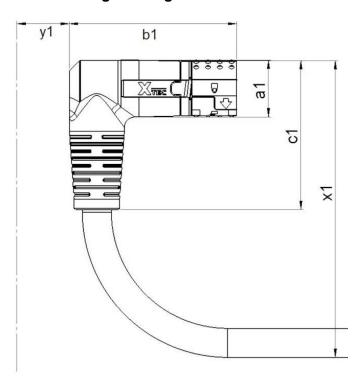
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5.3 Space requirement target

| DESIGNATION | VALUE | UNIT |
|--|-------|------|
| (a1) max. plug diameter | 22 | mm |
| (b1) Plug length | 63 | mm |
| (c1) Plug width | 57 | mm |
| (x1) in mated condition | 138,8 | mm |
| (y1) additional distance to interfering contour plugged in | 18 | mm |

5.4 Schematic diagram Target



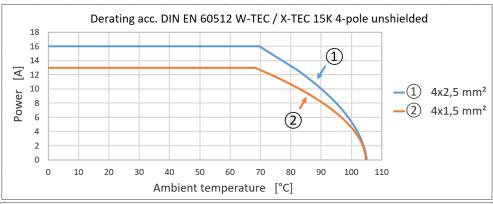
| 27.10.2023-RSP | Adaptation Eclass | 7.0 |
|----------------|------------------------|-------|
| 24.07.2023-RSP | New: IEC 61076-2-116 | 6.0 |
| 24.11.2022-RSP | Service approval | 5.0 |
| 23.08.2021-ROS | Service approval | 4.0 |
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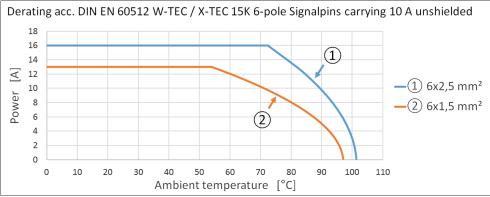


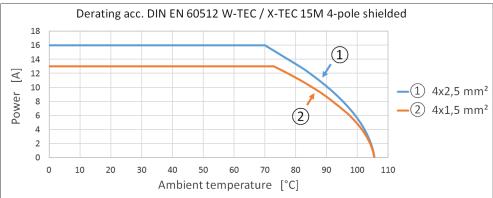
| UL- Identification | Order no. | |
|-------------------------------|----------------|--|
| W-TEC 15M-XXX-RCS-414XX-XX-TS | 1135024-xxxxx | |
| Designation | Datasheet | |
| W-TEC 15M SMOOTH/FEMALE-90°R | Created | |
| 4x2,5 DA4 | 27.10.2023-RSP | |

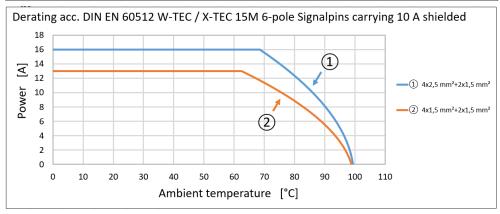
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6 Derating









| 27.10.2023-RSP | Adaptation Eclass | 7.0 |
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| 24.07.2023-RSP | New: IEC 61076-2-116 | 6.0 |
| 24.11.2022-RSP | Service approval | 5.0 |
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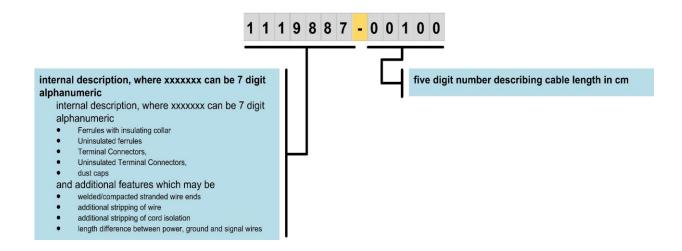


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| W-TEC 15M-XXX-RCS-414XX-XX-TS | 1135024-xxxxx | |
| Designation | Datasheet | |
| W-TEC 15M SMOOTH/FEMALE-90°R | Created | |
| 4x2,5 DA4 | 27.10.2023-RSP | |

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7 **Appendix Nomenclature** W-TEC 15K-GCS-GCS-61414-XX-TX-Familiy destignation Cable Screen S - shielded cable W-TEC X - cable not shielded Cable Assemblies Cable Fittings Cable Type **Connector Size** ${\sf P-PVC} \ ({\sf applicable} \ {\sf for} \ {\sf cable} \ {\sf not} \ {\sf shielded} \ {\sf variants} \ {\sf only})$ 12 Connector type Cable gland size XX - no cable gland M - metal connector Signal contact terminal cross-section Male/Female contactor type 14 - AWG 14 G - straight 16 - AWG 16 XX - no signal contacts X - No male/female connector Power contact terminal cross-section Male/Female contact type 16 – AWG 16 X - No male/female connector Number of poles T - No Male/female connector, additional terminal/ferrule crimped to wire ends, resistance welded wire ends, single wire lengths 6 - 6 poles may be varying (Female Panel mounted



| 27.10.2023-RSP | Adaptation Eclass | 7.0 | | UL- Identification | Order no. | |
|----------------|------------------------|-------|----------|-------------------------------|----------------|------|
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| 24.11.2022-RSP | Service approval | 5.0 | | Designation | Datasheet | |
| 23.08.2021-ROS | Service approval | 4.0 | LQ GROUP | W-TEC 15M SMOOTH/FEMALE-90°R | Created | Page |
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Male/Female contact plating

X – No male/female connector