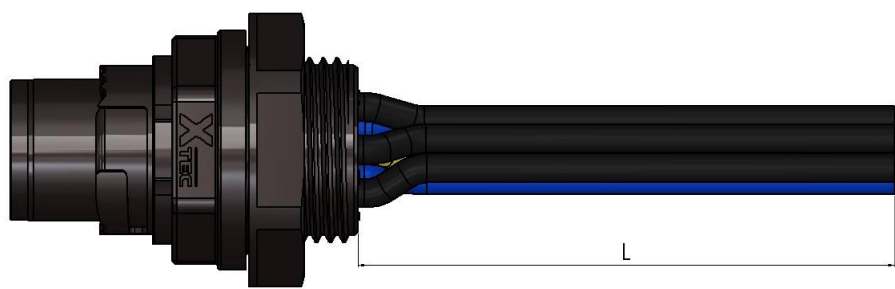


1 Datasheet X-TEC 15K Screw-in-male 6x2,5



source

destination

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


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	
Manufacturer Article Number	1124278	
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	12.0		UL- Identification	Order no.	
26.10.2023-RSP	Adaptation Eclass	11.0		X-TEC 15K-PCS-XXX-61414-XX-WX	1124278-xxxxx	
24.08.2023-RSP	Rated current main wires *	10.0		Designation	Datasheet	
04.08.2023-RSP	New: IEC 61076-2-116	9.0		X-TEC 15K Screw-in-male 6x2,5	Created	Page
Change No.	Description of changes	Index			08.11.2023-RSP	1

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	No	
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
Electrical connection	186	g/m
Connector Source	16,8	g


3.4 Approval

DESIGNATION	VALUE	UNIT
UL.CCN **	PVVA.E486020	
CSA.CCN **	PVVA7.E486020	
CCC	No	
GOST-R	No	
CE Nomenclature	X-TEC 15K-PCS-XXX-61414-XX-WX	

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	12.0		UL- Identification	Order no.	
26.10.2023-RSP	Adaptation Eclass	11.0		X-TEC 15K-PCS-XXX-61414-XX-WX	1124278-xxxxx	
24.08.2023-RSP	Rated current main wires *	10.0		Designation	Datasheet	
04.08.2023-RSP	New: IEC 61076-2-116	9.0		X-TEC 15K Screw-in-male 6x2,5	Created	Page
Change No.	Description of changes	Index			08.11.2023-RSP	2

The information contained in this data sheet was compiled with the greatest possible care.
For correctness, completeness and topicality the liability is limited to gross negligence.
All rights reserved to DIN 34

LQ Mechatronik-Systeme GmbH
Carl-Benz-Str. 6 D-74354 Besigheim
Tel. +49 (0) 71 43 / 968-0 - info@de.lq-group.com

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

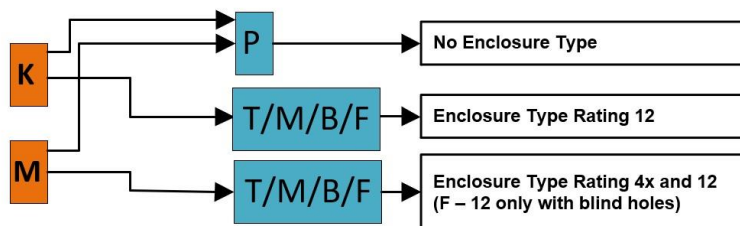
Suitable For Use On A Circuit Capable Of Delivering Not More Than 50kA rms Symmetrical Amperes, 480 Vac Maximum, When Protcted By A Circuit Breaker Rated Not More Than 16A, Having An Interrupting Rating Not Less Than 50kA rms Symmetrical Amperes, 480Vac Maximum.

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	90	°C
Fixed temperature range (LLT-ULT)	-25 ... +90	°C

08.11.2023-RSP	Adaptation Eclass	12.0		UL- Identification	Order no.	
26.10.2023-RSP	Adaptation Eclass	11.0		X-TEC 15K-PCS-XXX-61414-XX-WX	1124278-xxxxx	
24.08.2023-RSP	Rated current main wires *	10.0		Designation	Datasheet	
04.08.2023-RSP	New: IEC 61076-2-116	9.0		X-TEC 15K Screw-in-male 6x2,5	Created	Page
Change No.	Description of changes	Index			08.11.2023-RSP	3

The information contained in this data sheet was compiled with the greatest possible care.
For correctness, completeness and topicality the liability is limited to gross negligence.
All rights reserved to DIN 34

LQ Mechatronik-Systeme GmbH
Carl-Benz-Str. 6 D-74354 Besigheim
Tel. +49 (0) 71 43 / 968-0 - info@de.lq-group.com


3.6 UL Ratings

DESIGNATION	VALUE	UNIT
Reference to UL standard	2237	
max. connectable conductor size (AWG/KCMIL)	14	AWG
Auxiliary wires Wire gauge	14	AWG
Enclosure Type Rating	No	
flame-resistant (in accordance with UL94)	HB	

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	No	
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.






08.11.2023-RSP	Adaptation Eclass	12.0		UL- Identification	Order no.	
26.10.2023-RSP	Adaptation Eclass	11.0		X-TEC 15K-PCS-XXX-61414-XX-WX	1124278-xxxxx	
24.08.2023-RSP	Rated current main wires *	10.0		Designation	Datasheet	
04.08.2023-RSP	New: IEC 61076-2-116	9.0		X-TEC 15K Screw-in-male 6x2,5	Created	Page
Change No.	Description of changes	Index			08.11.2023-RSP	4

The information contained in this data sheet was compiled with the greatest possible care.
For correctness, completeness and topicality the liability is limited to gross negligence.
All rights reserved to DIN 34

LQ Mechatronik-Systeme GmbH
Carl-Benz-Str. 6 D-74354 Besigheim
Tel. +49 (0) 71 43 / 968-0 - info@de.lq-group.com


4 General structure

4.1 Allocation plan

1		BK1	2,5 mm ²
2		BK2	2,5 mm ²
3		BK3	2,5 mm ²
		GN-YE	2,5 mm ²
A		BU4	2,5 mm ²
B		BU5	2,5 mm ²

4.2 electrical assembly

DESIGNATION	VALUE	UNIT
Main wires number	4	
max. connectable conductor cross-section	2,5	mm ²
External cable diameter, max.	3,6	mm
Auxiliary wires Number	2	
Auxiliary wires Wire gauge	2,5	mm ²
max. auxiliary core diameter incl. insulation D	3,6	mm
coat colour main wires	black/green-yellow	
coat colour auxiliary wires	blue	
Identification of main wires	consecutive number imprint (1-3)	
Identification of auxiliary wires	continuous letter printing (A-B)	
Core insulation material	PVC	

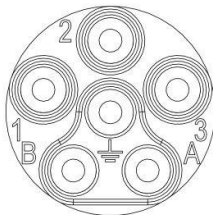
08.11.2023-RSP	Adaptation Eclass	12.0		UL- Identification	Order no.	
26.10.2023-RSP	Adaptation Eclass	11.0		X-TEC 15K-PCS-XXX-61414-XX-WX	1124278-xxxxx	
24.08.2023-RSP	Rated current main wires *	10.0		Designation	Datasheet	
04.08.2023-RSP	New: IEC 61076-2-116	9.0		X-TEC 15K Screw-in-male 6x2,5	Created	Page
Change No.	Description of changes	Index			08.11.2023-RSP	5

The information contained in this data sheet was compiled with the greatest possible care.
For correctness, completeness and topicality the liability is limited to gross negligence.
All rights reserved to DIN 34

LQ Mechatronik-Systeme GmbH
Carl-Benz-Str. 6 D-74354 Besigheim
Tel. +49 (0) 71 43 / 968-0 - info@de.lq-group.com


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	Screw-in male	
Number of poles	6	
Construction form of the plug connector	straight	
Material Seals	NBR	
production type	mounted	
material of housing	PA 6.6	
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	IP66/67	

08.11.2023-RSP	Adaptation Eclass	12.0		UL- Identification	Order no.	
26.10.2023-RSP	Adaptation Eclass	11.0		X-TEC 15K-PCS-XXX-61414-XX-WX	1124278-xxxxx	
24.08.2023-RSP	Rated current main wires *	10.0		Designation	Datasheet	
04.08.2023-RSP	New: IEC 61076-2-116	9.0		X-TEC 15K Screw-in-male 6x2,5	Created	Page
Change No.	Description of changes	Index			08.11.2023-RSP	6

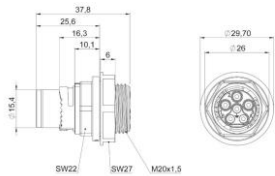
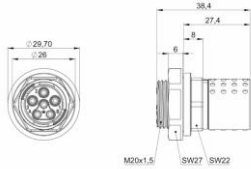
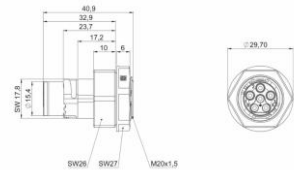
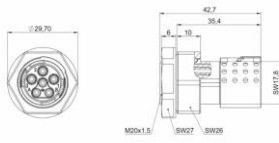
The information contained in this data sheet was compiled with the greatest possible care.
For correctness, completeness and topicality the liability is limited to gross negligence.
All rights reserved to DIN 34

LQ Mechatronik-Systeme GmbH
Carl-Benz-Str. 6 D-74354 Besigheim
Tel. +49 (0) 71 43 / 968-0 - info@de.lq-group.com

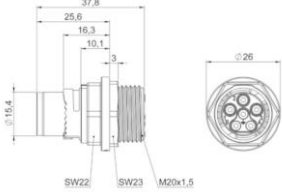
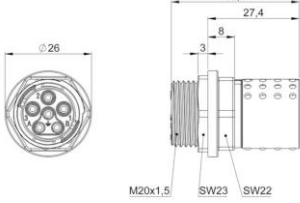
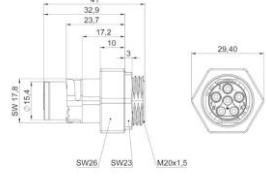
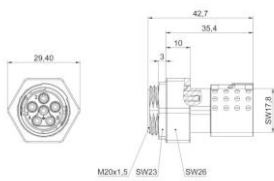
6 Mechanical representations


6.1 Schematic diagrams threaded

6.1.1 With plastic locknut

X - T E C 1 5 K - P - - - X X X ...	X - T E C 1 5 K - X X X - P - - ...
	
X - T E C 1 5 M - P - - - X X X ...	X - T E C 1 5 M - X X X - P - - ...
	

6.1.2 With metal locknut

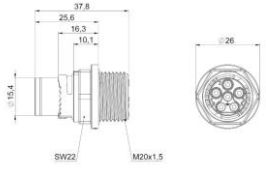
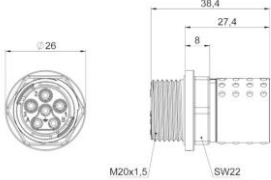
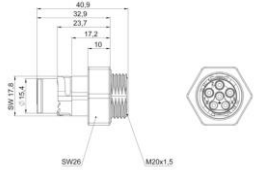
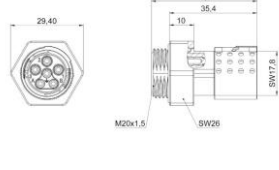
X - T E C 1 5 K - M - - - X X X ...	X - T E C 1 5 K - X X X - M - - ...
	
X - T E C 1 5 M - M - - - X X X ...	X - T E C 1 5 M - X X X - M - - ...
	

08.11.2023-RSP	Adaptation Eclass	12.0		UL- Identification	Order no.	
26.10.2023-RSP	Adaptation Eclass	11.0		X-TEC 15K-PCS-XXX-61414-XX-WX	1124278-xxxxx	
24.08.2023-RSP	Rated current main wires *	10.0		Designation	Datasheet	
04.08.2023-RSP	New: IEC 61076-2-116	9.0		X-TEC 15K Screw-in-male 6x2,5	Created	Page
Change No.	Description of changes	Index			08.11.2023-RSP	7

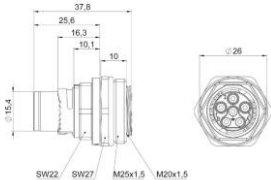
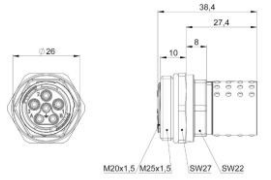
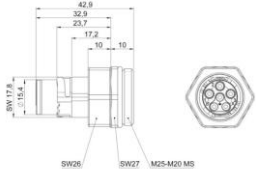
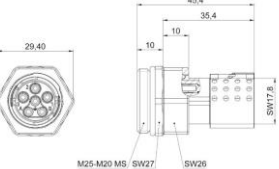
The information contained in this data sheet was compiled with the greatest possible care.
For correctness, completeness and topicality the liability is limited to gross negligence.
All rights reserved to DIN 34


LQ Mechatronik-Systeme GmbH
Carl-Benz-Str. 6 D-74354 Besigheim
Tel. +49 (0) 71 43 / 968-0 - info@de.lq-group.com

6.1.3 Without locknut

X - T E C 1 5 K - T _ _ - X X X ...	X - T E C 1 5 K - X X X - T _ _ ...
	
X - T E C 1 5 M - T _ _ - X X X ...	X - T E C 1 5 M - X X X - T _ _ ...
	

6.1.4 With reduction

X - T E C 1 5 K - B _ _ - X X X ...	X - T E C 1 5 K - X X X - B _ _ ...
	
X - T E C 1 5 M - B _ _ - X X X ...	X - T E C 1 5 M - X X X - B _ _ ...
	

08.11.2023-RSP	Adaptation Eclass	12.0		UL- Identification	Order no.	
26.10.2023-RSP	Adaptation Eclass	11.0		X-TEC 15K-PCS-XXX-61414-XX-WX	1124278-xxxxx	
24.08.2023-RSP	Rated current main wires *	10.0		Designation	Datasheet	
04.08.2023-RSP	New: IEC 61076-2-116	9.0		X-TEC 15K Screw-in-male 6x2,5	Created	Page
Change No.	Description of changes	Index			08.11.2023-RSP	8

The information contained in this data sheet was compiled with the greatest possible care.
For correctness, completeness and topicality the liability is limited to gross negligence.
All rights reserved to DIN 34

LQ Mechatronik-Systeme GmbH
Carl-Benz-Str. 6 D-74354 Besigheim
Tel. +49 (0) 71 43 / 968-0 - info@de.lq-group.com

6.2 Drilling patterns for assembly

6.2.1 Threaded body plug

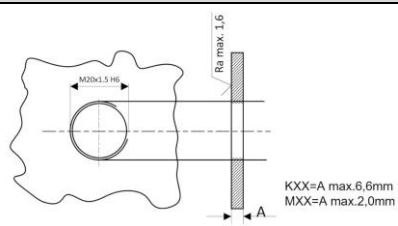
X - T E C 1 5 - - - X X X ...

K

M

T

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



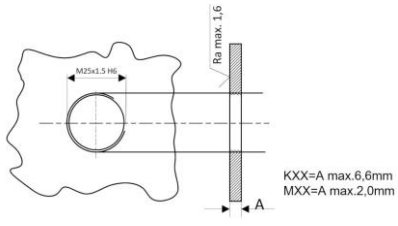
X - T E C 1 5 - - - X X X ...

K

M

B

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



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

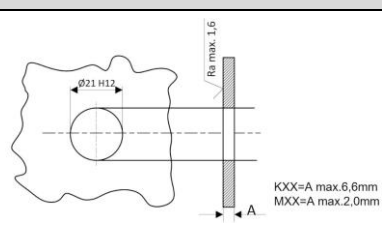
K


M

T

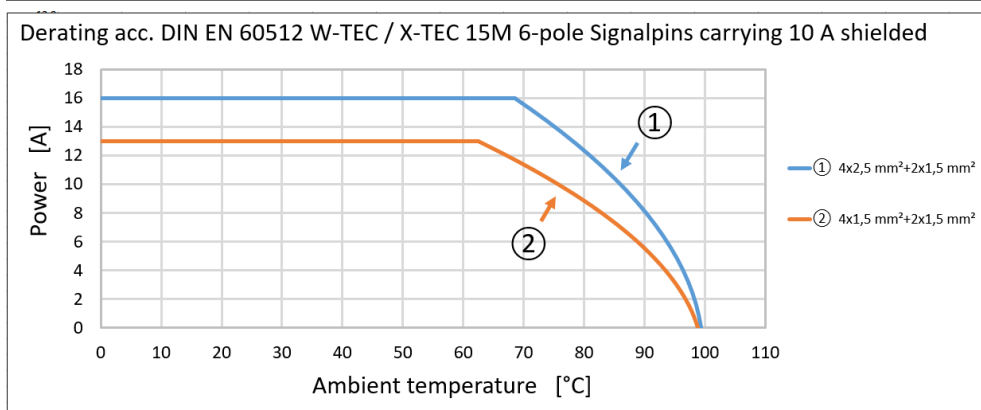
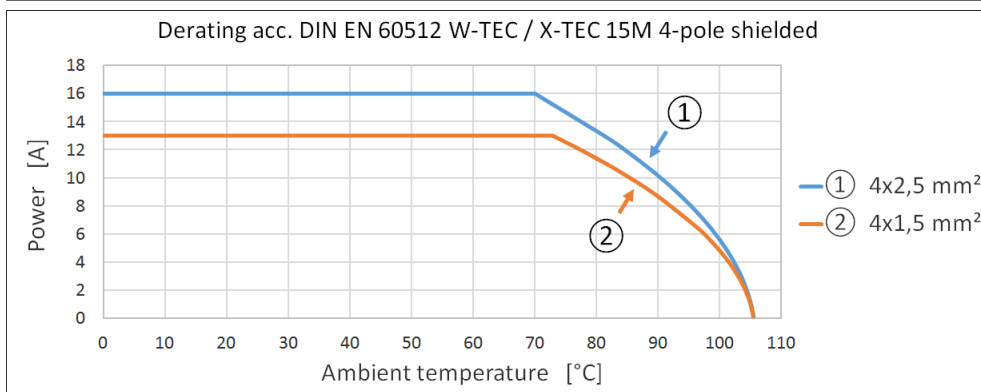
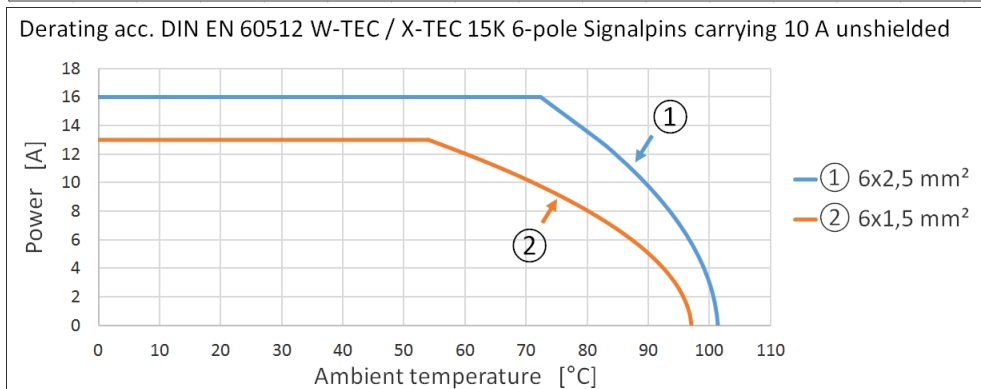
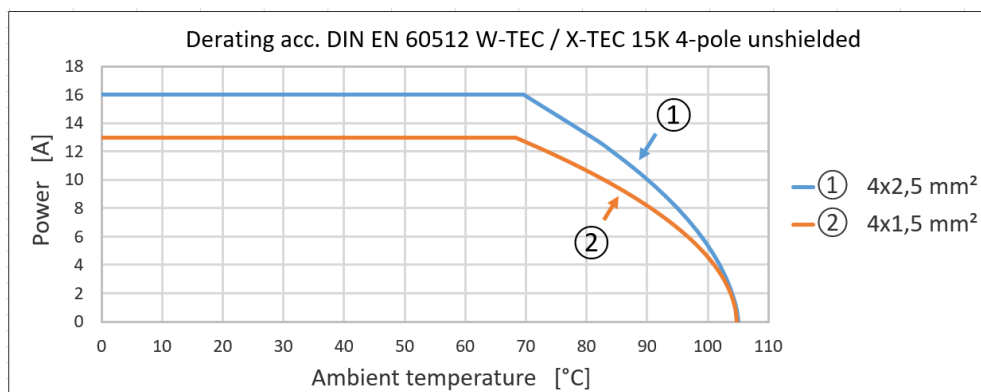
M


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



08.11.2023-RSP	Adaptation Eclass	12.0		UL- Identification	Order no.	
26.10.2023-RSP	Adaptation Eclass	11.0		X-TEC 15K-PCS-XXX-61414-XX-WX	1124278-xxxxx	
24.08.2023-RSP	Rated current main wires *	10.0		Designation	Datasheet	
04.08.2023-RSP	New: IEC 61076-2-116	9.0		X-TEC 15K Screw-in-male 6x2,5	Created	Page
Change No.	Description of changes	Index			08.11.2023-RSP	9

7 Derating

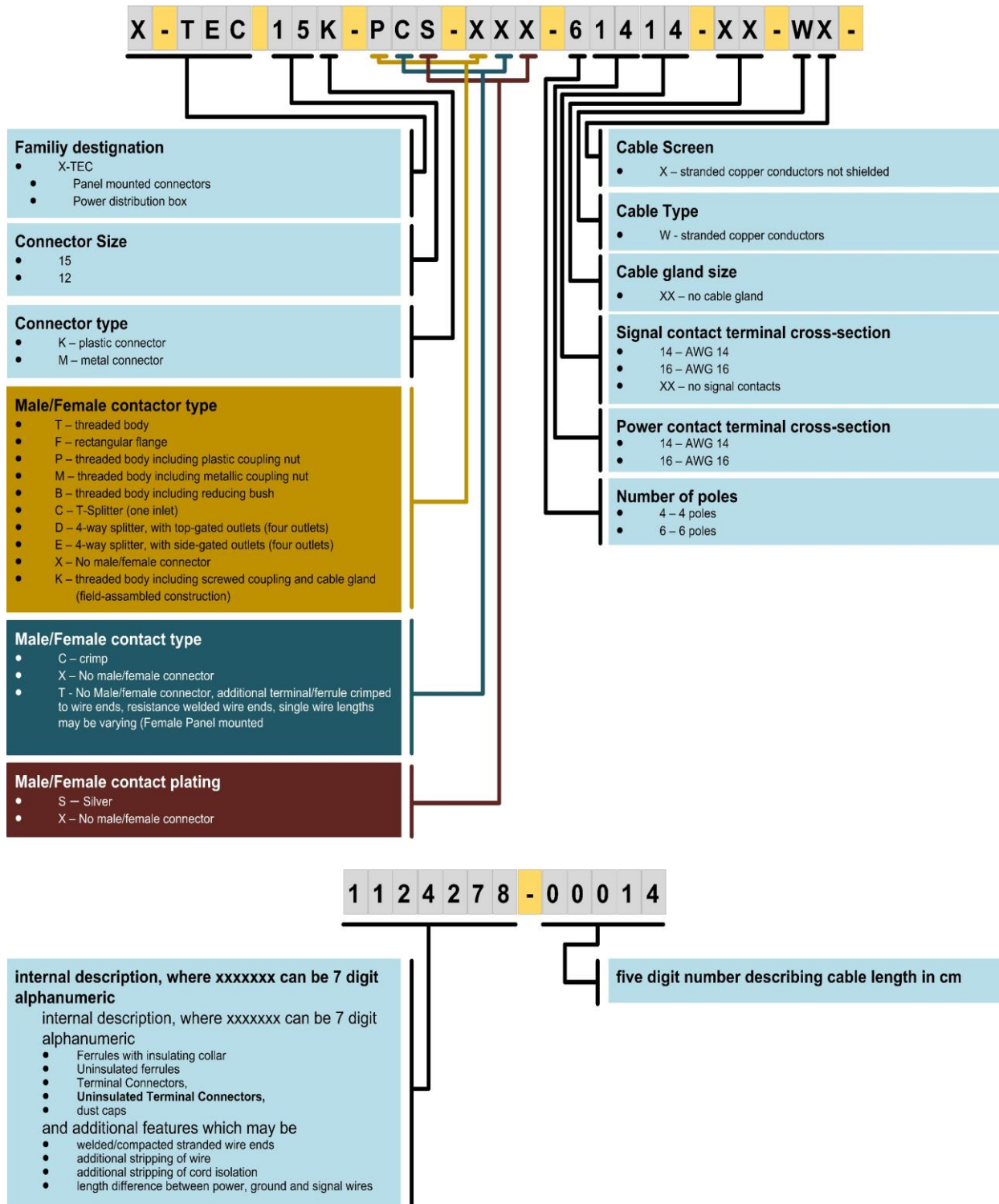



08.11.2023-RSP	Adaptation Eclass	12.0		UL- Identification	Order no.	
26.10.2023-RSP	Adaptation Eclass	11.0		X-TEC 15K-PCS-XXX-61414-XX-WX	1124278-xxxxx	
24.08.2023-RSP	Rated current main wires *	10.0		Designation	Datasheet	
04.08.2023-RSP	New: IEC 61076-2-116	9.0		X-TEC 15K Screw-in-male 6x2,5	Created	Page
Change No.	Description of changes	Index			08.11.2023-RSP	10

The information contained in this data sheet was compiled with the greatest possible care.
For correctness, completeness and topicality the liability is limited to gross negligence.
All rights reserved to DIN 34

LQ Mechatronik-Systeme GmbH
Carl-Benz-Str. 6 D-74354 Besigheim
Tel. +49 (0) 71 43 / 968-0 - info@de.lq-group.com

8 Appendix Nomenclature



08.11.2023-RSP	Adaptation Eclass	12.0		UL- Identification	Order no.	
26.10.2023-RSP	Adaptation Eclass	11.0		X-TEC 15K-PCS-XXX-61414-XX-WX	1124278-xxxxx	
24.08.2023-RSP	Rated current main wires *	10.0		Designation	Datasheet	
04.08.2023-RSP	New: IEC 61076-2-116	9.0		X-TEC 15K Screw-in-male 6x2,5	Created	Page
Change No.	Description of changes	Index			08.11.2023-RSP	11

The information contained in this data sheet was compiled with the greatest possible care.
For correctness, completeness and topicality the liability is limited to gross negligence.
All rights reserved to DIN 34

LQ Mechatronik-Systeme GmbH
Carl-Benz-Str. 6 D-74354 Besigheim
Tel. +49 (0) 71 43 / 968-0 - info@de.lq-group.com