

Trusted Communications Cables

Product Overview

This document provides detailed information for the types of Trusted® Communications Cables currently available. These are listed in Table 1 below.

Cable Type	Description
TC-301-02-xmx	Local Expansion Cable From Expander Interface Adapter (T8312) to Expander Processor (T8310)
TC-301-03-xmx	Local Expansion Cable (UL) From Expander Interface Adapter (T8312) to Expander Processor (T8310)
TC-302-02-xmx	Remote Expansion Cable From Expander Interface Adapter (T8312) to Fibre TX/RX unit (T8314)
TC-302-03-xmx	Remote Expansion Cable (UL) From Expander Interface Adapter (T8312) to Fibre TX/RX unit (T8314)
TC-303-02-xmx	Remote Expansion Cable From Fibre TX/RX unit (T8314) to Expander Processor (T8310)
TC-303-03-xmx	Remote Expansion Cable (UL) From Fibre TX/RX unit (T8314) to Expander Processor (T8310)
TC-304-01	Maintenance Cable
TC-305-01	Communications Cable Assembly From Communication Interface (T8151) to flying leads
TC-306-02	Input Smart Slot Jumper Cable
TC-306-03	Input Smart Slot Jumper Cable (UL)
TC-308-02	Output Smart Slot Jumper Cable
TC-308-03	Output Smart Slot Jumper Cable (UL)
TC-310-02	Output Smart Slot Jumper Cable from Digital Output Module (T8472)

Cable Type	Description
TC-310-03	Output Smart Slot Jumper Cable from Digital Output Module (T8472) (UL)
TC-311-02	Local Expansion Cable Assembly, 1 way From Expander Interface Module (T8311) to Triple Modular Redundant (TMR) Expander Processor (T8310)
TC-311-03	Local Expansion Cable Assembly, 1 way (UL) From Expander Interface Module (T8311) to Triple Modular Redundant (TMR) Expander Processor (T8310)
TC-312-02-xmx	Local Expansion Cable Assembly, 2 way From Expander Interface Module (T8311) to Triple Modular Redundant (TMR) Expander Processor (T8310)
TC-312-03-xmx	Local Expansion Cable Assembly, 2 way (UL) From Expander Interface Module (T8311) to Triple Modular Redundant (TMR) Expander Processor (T8310)
TC-313-02-xmx	Local Expansion Cable Assembly, 3 way From Expander Interface Module (T8311) to Triple Modular Redundant (TMR) Expander Processor (T8310)
TC-313-03-xmx	Local Expansion Cable Assembly, 3 way (UL) From Expander Interface Module (T8311) to Triple Modular Redundant (TMR) Expander Processor (T8310)
TC-314-02-xmx	Expander Electrical Extension Cable From Processor Interface Adapter (T8312) to TMR Expander Processor (T8310)
TC-314-03-xmx	Expander Electrical Extension Cable (UL) From Processor Interface Adapter (T8312) to TMR Expander Processor (T8310)

Table 1 Trusted Communications Cables

The -01 / -02 / -03 suffix of the cable part number dictates the properties of the cable:

- 01 suffix cables are PVC.
- 02 suffix cables are cables which are Halogen free, i.e. low smoke zero halogen, flame retardant to IEC 60332-3 Cat A.
- 03 suffix cables are UL Certified.

The cables are manufactured to standard integration requirements, only the type of cable insulation must be specified. For non-standard lengths, length must be specified to the nearest 0.5 m in the format xmx, e.g. 2m0 for a cable length of 2.0 m. This detail must be added to the end of the part number. The maintenance cables are supplied with PVC sheathed cables only. When ordering cables, it is recommended that the user supplies the details as shown in Table 1.

10. Communications Cable Type TC-31X-0X

This type of Communications Cable is shown in Figure 10 below.

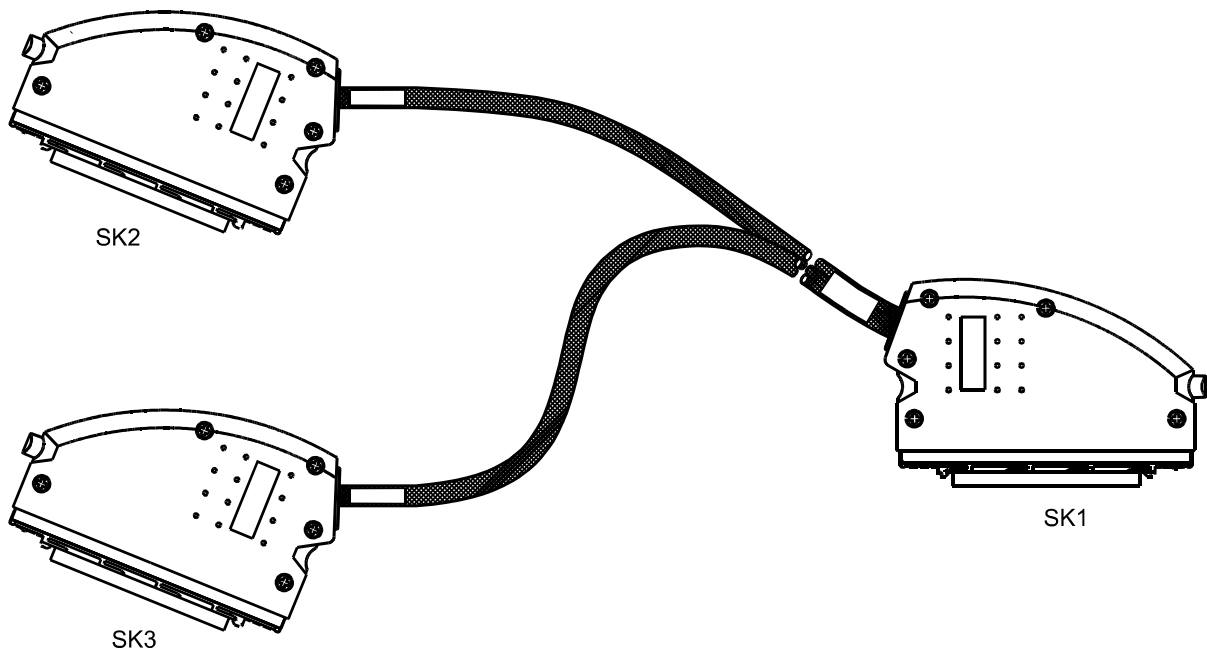


Figure 10 Communications Cable Type TC-31X-0X

This type of Trusted Communications Cable is designed to provide the multi-drop connections between the Trusted Expander Interface modules T8311 in the Trusted Controller Chassis and the Trusted TMR Expander Processors T8310 in the Trusted Expander Chassis. There are three variations of this cable as detailed in Table 3 below.

Cable Type	Description
TC-311-02	Local Expansion Cable Assembly, 1 way
TC-311-03	Local Expansion Cable Assembly, 1 way (UL)
TC-312-02	Local Expansion Cable Assembly, 2 way
TC-312-03	Local Expansion Cable Assembly, 2 way (UL)
TC-313-02	Local Expansion Cable Assembly, 3 way
TC-313-03	Local Expansion Cable Assembly, 3 way (UL)

Table 3 Trusted Communications Cables

Each end of the cable is fitted with a 96-way type 'C' connector housed in a double-width hood. Each variation of the cable is made up of a number of elements with SKT1 in all cases

being connected to the Trusted Expander Interface modules. The make-up of the cables is detailed in below.

Cable	No. of Elements	Element Length
TC-311-02/0 3	1	SKT1 to SKT2 – 2m0
TC-312-02/0 3	2	SKT1 to SKT2 – 2m0 SKT1 to SKT3 – 2m5
TC-313-02/0 3	3	SKT1 to SKT2 – 2m0 SKT1 to SKT3 – 2m5 SKT1 to SKT4 – 3m0

The cable assembly consists of either:

- Cat 6 Plus, screened with LSZH sheath (TC-31X-02), or
- Cat 5e, screened UL Certified sheath (TC-31X-03).

Both ends of the sheathing are covered in heatshrink sleeving and heated to help prevent fraying.