

Available Terminal Base Units and Accessories

Types of Terminal Base and Accessories

Type	Description
Terminal Base	Standard terminal base units which consist of different available termination types such as cage-clamp, spring-clamp and screw-clamp.
D-Shell Terminal Base	D-shell termination for both digital and analog modules, available with 37-pin or 62-pin.
Accessories	Accessories consist of panel kit, label kit, dummy filler module, cold junction compensation kit and extender cables.

Catalog Numbers

Module Type	Catalog Numbers	Page
Terminal Base Units	1794-TB2 1794-TB3 1794-TB3K 1794-TB32 1794-TB3G 1794-TB3GK 1794-TB3T 1794-TB3TK 1794-TB3S 1794-TB3SK 1794-TB3ZS 1794-TB3GS 1794-TB3GSK 1794-TB3TS 1794-TB3TSK 1794-TBKD 1794-TBN 1794-TBNK 1794-TBNF	3
D-Shell Terminal Base	1794-TB37DS 1794-TB62DS	6
Accessories	1794-CE1 1794-CE3 1794-NM1 1794-LBL 1794-N2 1794-CJC2	7

1794-TB2, 1794-TB3, 1794-TB3K, 1794-TB32, 1794-TB3G, 1794-TB3GK, 1794-TB3T, 1794-TB3TK, 1794-TB3S, 1794-TB3SK, 1794-TB32S, 1794-TB3GS, 1794-TB3GSK, 1794-TB3TS, 1794-TB3TSK, 1794-TBN, 1794-TBNF, 1794-TBNK, 1794-TBKD, 1794-TB37DS, 1794-TB62DS

FLEX I/O Terminal Base Units

Technical Specifications

Catalog	Termination type	Connections	Used in applications	Current capacity, max	Wiring category	Purpose
1794-TB2	Cage clamp	16 I/O; 18 common terminals; 2 +V terminals	Up to 125V AC/DC	10 A	2	A generic 2-wire version of the 1794-TB3.
1794-TB3 1794-TB3K ⁽¹⁾		16 I/O; 18 common terminals; 18 +V terminals			2,3 or 4	Primarily intended for use with input modules when using 3-wire input proximity switches – can also be used with output modules.
1794-TB3S 1794-TB3SK	Spring clamp					A spring clamp version of the 1794-TB3 – provides faster, simpler wire installation.
1794-TB32	Cage clamp	32 I/O; 8 common terminals; 8 +V terminals	Up to 31.2V DC	A 32-point version of the 1794-TB3 to be used with 32-point digital modules and the 1794-IB16D module.		
1794-TB32S	Spring clamp			A spring clamp version of the 1794-TB32.		
1794-TB3G 1794-TB3GK	Grounded screw clamp	36 I/O; 2 common terminals; 2 +V terminals;		A screw clamp terminal base unit with individual grounding used with certain analog modules.		
1794-TB3GS 1794-TB3GSK	Grounded spring clamp	10 chassis ground terminals		A spring clamp version of the 1794-TB3G.		
1794-TB3T 1794-TB3TK	Cage clamp, temperature	16 I/O; 10 common terminals; 4 +V terminals; 8 chassis ground terminals;	Up to 125V AC/DC		A cage clamp terminal base to be used with the 1794-IT8. It also provides chassis ground connections for 1794-IR8 (RTD module) and analog modules.	
1794-TB3TS 1794-TB3TSK	Spring clamp, temperature	2 sets (6 terminals)of CJC for temperature modules		A spring clamp version of the 1794-TB3T.		
1794-TBKD	Cage clamp, knife disconnect	16 I/O; 18 common terminals; 2 +V terminals	Up to 132V AC		A cage clamp terminal base with 16 knife disconnects.	
1794-TBN 1794-TBNK	Screw clamp, NEMA-style	16 I/O; 2 common terminals; 2 +V terminals	250V AC/DC		A NEMA-style screw clamp terminal base for larger gauge wires with a cover for I/O wiring.	
1794-TBNF ⁽²⁾	Screw clamp, fused NEMA-style			Provides eight 5 x 20 mm fused, screw terminals with a cover for I/O wiring.		

(1) The letter K in the last position of the catalog number, before the series designation, indicates a conformal coated versions of standard modules and can be used with extended temperature modules (modules ending in -XT)

(2) Contains eight 5 x 20 mm fuses (one for each even-numbered terminal – 0...14 on row B). Shipped with 1.6 A, 250V AC Slow Blow fuse suitable for the 1794-0A8 AC output module and 1794-0W8 module with a replacement fuse. Refer to individual installation instructions for fusing recommendations for other modules.

General Specifications

Attribute	Value
Terminal screw torque	1794-TB3TK, 1794-TB3G, 1794-TB3GK, 1794-TB2, 1794-TB32, 1794-TB3, 1794-TB3K, 1794-TB3T: 0.56...0.79 Nm (5...7 lb-in) 1794-TBKD: 0.3...0.6 Nm (2.6...5.3 lb-in) 1794-TBN, 1794-TBNF, 1794-TBNK: 1.4 Nm (12 lb-in)
Supply voltage range	FLEXBUS: 5V DC, 640 mA I/O Terminals: 2 A max 1794-TB3SK, 1794-TB3TK, 1794-TB2, 1794-TB3, 1794-TB3K, 1794-TB3S, 1794-TB3T, 1794-TB3TS: V/COM Terminals: 125V DC/AC, 50/60 Hz, 10 A 1794-TB3GSK, 1794-TB3G, 1794-TB3GS, 1794-TB3GK, 1794-TB32, 1794-TB32S: V/COM Terminals: 31.2V DC/AC, 50/60 Hz, 10 A 1794-TBN, 1794-TBNF, 1794-TBNK: V/COM Terminals: 250V DC/AC, 50/60 Hz, 10 A 1794-TBKD only: Terminal Block: 120V AC, 50/60 Hz, 10 A Disconnecting Switch: 3 A, 20 mΩ ATTENTION A disconnecting switch does not shut off the current. Make or break a circuit only under no-load conditions.
Isolation voltage	1794-TBN, 1794-TBNF, 1794-TBNK: Capable of 250V (continuous) maximum, Basic Insulation Type, Field Wiring Terminals to FLEXBUS, or the lesser of the installed module. 1794-TB3SK, 1794-TB3TK, 1794-TB3T, 1794-TB3TSK, 1794-TB2, 1794-TB3, 1794-TB3K, 1794-TB3S, 1794-TB3TS: Capable of 125V (continuous) maximum, Basic Insulation Type, Field Wiring Terminals to FLEXBUS, or the lesser of the installed module 1794-TB3G, 1794-TB3GS, 1794-TB3GK, 1794-TB3GSK, 1794-TB32, 1794-TB32S: Capable of 50V (continuous) maximum, Basic Insulation Type, Field Wiring Terminals to FLEXBUS, or the lesser of the installed module. Tested at 2121V DC/60s, Field Wiring Terminals to FLEXBUS. 1794-TBKD: 220V DC/s, Field Wiring Terminals to Functional Ground.
Wire size	1794-TB3SK, 1794-TB3GSK, 1794-TB3TSK, 1794-TB3GK, 1794-TB3GS, 1794-TB32S, 1794-TB3, 1794-TB3K, 1794-TB3S, 1794-TB3TS, 1794-TBN, 1794-TBNF, 1794-TBNK: 0.34... 3.3 mm² (22... 12 AWG) solid or stranded copper wire rated at 75 °C (167 °F) or greater, 1.2 mm (3/64 in.) insulation max. Strip Length: 5... 6 mm (0.20...0.24 in.) 1794-TBKD: 0.34... 2.1 mm² (22... 14 AWG) solid or stranded copper wire rated at 75 °C (167 °F) or greater, 1.2 mm (3/64 in.) insulation max 1794-TB3TK, 1794-TB3G, 1794-TB2, 1794-TB32: 0.21... 1.3 mm² (24... 16 AWG) stranded copper wire rated at 75 °C (167 °F) or greater, 1.2 mm (3/64 in.) insulation max
North American temp code	1794-TB3G, 1794-TB3GS, 1794-TB3GSK, 1794-TB3GK, 1794-TB3, 1794-TB3K, 1794-TB3T, 1794-TB3TK, 1794-TB3S, 1794-TB3SK, 1794-TB3TS, 1794-TB3TSK, 1794-TBN, 1794-TBNK, 1794-TB32, 1794-TB32S: T4A 1794-TB2: T6
IEC temp code	1794-TB3G, 1794-TB3GS, 1794-TB3GSK, 1794-TB3GK, 1794-TB3, 1794-TB3K, 1794-TB3T, 1794-TB3TK, 1794-TB3S, 1794-TB3SK, 1794-TB3TS, 1794-TB3TSK, 1794-TBN, 1794-TBNK: T4 1794-TB2: T6
Dimensions, HxWxD (with module installed in terminal base)	94 x 94 x 69 mm (3.7 x 3.7 x 2.7 in.)
Publication, installation instructions	1794-IN092

Environmental⁽¹⁾

Attribute	Value
Temperature, operating	1794-TB3G, 1794-TB3GS, 1794-TB3GSK, 1794-TB3GK, 1794-TB3, 1794-TB3K, 1794-TB3T, 1794-TB3TK, 1794-TB3S, 1794-TB3SK, 1794-TB3TS, 1794-TB3TSK, 1794-TB32, 1794-TB32S, 1794-TBN, 1794-TBNK: IEC 60068-2-1 (Test Ad, Operating Cold), IEC 60068-2-2 (Test Bd, Operating Dry Heat), IEC 60068-2-14 (Test Nb, Operating Thermal Shock): -20...70 °C (-4...158 °F) 1794-TBKD, 1794-TB37DS, 1794-TB62DS: 0...55 °C (32...131 °F) 1794-TBNF, 1794-TB2: -20...55 °C (-4...131 °F)
Temperature, nonoperating	IEC 60068-2-1 (Test Ab, Unpackaged Non-operating Cold), IEC 60068-2-2 (Test Bb, Unpackaged Non-operating Dry Heat), IEC 60068-2-14 (Test Na, Unpackaged Non-operating Thermal Shock): -40...85 °C (-40...185 °F) 1794-TBKD only: -20...85 °C (-4...185 °F)
Relative humidity	IEC 60068-2-30 (Test Db, Unpackaged Damp Heat): 5...95% noncondensing
Vibration	IEC 60068-2-6 (Test Fc, Operating): 5 g @ 10...500 Hz
Shock, operating	All catalogs except 1794-TBKD: IEC 60068-2-27 (Test Ea, Unpackaged Shock): 30 g
Shock, nonoperating	All catalogs except 1794-TBKD: IEC 60068-2-27 (Test Ea, Unpackaged Shock): 50 g

(1) EMC specifications determined by the installed modules.

Certifications

Certifications (when product is marked) ⁽¹⁾	Description
UL	1794-TB2: UL Listed Industrial Control Equipment. See UL File E65584.
c-UL-us	1794-TB3G, 1794-TB3GS, 1794-TB3GSK, 1794-TB3GK, 1794-TB3, 1794-TB3K, 1794-TB3T, 1794-TB3TK, 1794-TB3S, 1794-TB3TS, 1794-TB3SK, 1794-TB3TSK, 1794-TBN, 1794-TBNK, 1794-TB32, 1794-TB32S: UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E65584. UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada. See UL File E194810. 1794-TBKD, 1794-TBNF: UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E65584.
CSA	1794-TB2, 1794-TB3, 1794-TB3K, 1794-TB3T, 1794-TB3S, 1794-TB3TS, 1794-TB3TK, 1794-TB3SK, 1794-TB3TSK, 1794-TBN, 1794-TBNK, 1794-TB3G, 1794-TB3GK, 1794-TB3GS, 1794-TB3GSK: CSA Certified Process Control Equipment. See CSA File LR54689C. CSA Certified Process Control Equipment for Class I, Division 2 Group A,B,C,D Hazardous Locations. See CSA File LR69960C. 1794-TBNF: CSA Certified Process Control Equipment. See CSA File LR54689C.
CE	European Union 2004/108/EC EMC Directive, compliant with: EN 61326-1; Meas./Control/Lab., Industrial Requirements EN 61000-6-2; Industrial Immunity EN 61000-6-4; Industrial Emissions EN 61131-2; Programmable Controllers (Clause 8, Zone A & B) European Union 2006/95/EC LVD, compliant with: EN 61131-2; Programmable Controllers (Clause 11)
C-Tick	Australian Radiocommunications Act, compliant with: AS/NZS CISPR 11; Industrial Emissions