

REVISIONS				
P	LTR	DESCRIPTION	DATE	OWN
M	REV PER ECO	17-012253	8-28-17	CT DC

PART NO. VARIABLES:

MTCPQKTXXXXXXXX

- KEYING CODE AA THRU DD (SEE TABLE I)
- G = SHIELD GROUND BUS BAR & GROUND BLOCK INSTALLED (SEE TABLE II FOR THE RECOMMENDED GROUND BLOCK PART NUMBERS)
- F = NO SHIELD GROUND BUS BAR OR GROUND BLOCK
- P = PIN INSERT (SEE TABLE III FOR THE RECOMMENDED PIN CONTACT PART NUMBERS)
- S = SOCKET INSERT (SEE TABLE III FOR THE RECOMMENDED SOCKET CONTACT PART NUMBERS)
- N = NO CONTACTS
- 0 = NO INSERTS
- 2 = 1" CONNECTOR, INSERT SIZE 22 (SEE TABLE IV)
- 6 = 1" CONNECTOR, INSERT SIZE 16 (SEE TABLE IV)
- 22 = 2" CONNECTOR, INSERTS SIZE 22 PRIMARY & SECONDARY (SEE TABLE IV)
- 26 = 2" CONNECTOR, INSERTS SIZE 22 PRIMARY & SIZE 16 SECONDARY (SEE TABLE IV)
- 62 = 2" CONNECTOR, INSERTS SIZE 16 PRIMARY & SIZE 22 SECONDARY (SEE TABLE IV)
- 66 = 2" CONNECTOR, INSERTS SIZE 16 PRIMARY & SECONDARY (SEE TABLE IV)
- P = PLUG
- R = RECEPTACLE
- F = FLENGED RECEPTACLE
- 1 = 1" INCH CONNECTOR
- 2 = 2" INCH CONNECTOR
- KIT
- MTC CONNECTOR, POWER BLOCK, QUICK DISCONNECT

SEE TABLE V



PERFORMANCE

MTCPQ MEETS RAYCHEM SPECIFICATION C-6114.
DESIGNED TO MEET ARINC-600 ENVIRONMENTAL REQUIREMENTS.



PLUG



RECEPTACLE

GROUNDING BLOCK
(1-INCH SHOWN)

THIS DRAWING IS A CONTROLLED DOCUMENT.		DIN C.C.THOMAS 4-20-15	20APR2015		 TE Connectivity
DIMENSIONS: INCHES		CHK M. SPICER	4-20-15		
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD M. SPICER	4-20-15		NAME
0. PLC ± .005	1. PLC ± .005	PRODUCT SPEC			MTCP POWER BLOCK QUICK DISCONNECT CONNECTOR KIT
2. PLC ± .005	3. PLC ± .005	APPLICATION SPEC			
4. PLC ± .005	ANGLES ± .005	MATERIAL			RESTRICTED TO
FINISH		WEIGHT	0	SIZE	A1
		CAGE CODE		DRAWING NO	
		06090		MTC=MTCPQKTXXXXXXXX	
		CUSTOMER DRAWING		SCALE	NTS
		SHEET		1 OF 3	
		REV		M	

TABLE I: KEYING CODES

POSITION OF PROJECTING TAB (TYP)		
	-A A-	
	-A B-	
	-A C-	
	-A D-	
	-B A-	
	-B B-	
	-B C-	
	-B D-	
	-C A-	
	-C B-	
	-C C-	
	-C D-	
	-D A-	
	-D B-	
	-D C-	
	-D D-	
	-X X-	
RECEPTACLE	CODE	PLUG

TABLE II: SHIELD GROUNDING

	1" ACCESSORY CONTACTS	2" ACCESSORY CONTACTS
PLUG	1X CHA-0307 OR 1X CHA-0303 10X M39029/58-360	1X CHA-0308 OR 1X CHA-0304 20X M39029/58-360
RECEPTACLE	1X CHA-0305 OR 1X CHA-0301 10X M39029/58-360	1X CHA-0306 OR 1X CHA-0302 20X M39029/58-360

CONTACTS SHOWN IN TABLE II AND III ARE NOT INCLUDED IN THE KIT. CUSTOMER HAS TO BUY THEM SEPARATELY.

TABLE III: MTCP CRIMP CONTACTS

	SIZE	RAYCHEM P/N	MILITARY P/N
PIN	16	CTA-0079	M39029/58-364
	22	CTA-0166	
SOCKET	16	CTA-0078	M39029/57-358
	22	CTA-0165	

GROUNDING BLOCKS ARE INSTALLED WITH A TIGHTENING TORQUE OF 8.0±0.4 INCH-POUNDS.

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWG: C.C.THOMAS 20APR2015	TE Connectivity	
DIMENSIONS: INCHES		CHK: M. SPICER 4-20-15	NAME: MTCP POWER BLOCK QUICK DISCONNECT CONNECTOR KIT	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APP'D: M. SPICER 4-20-15	RESTRICTED TO: ---	
0. PLC ± .005	1. PLC ± .005	PRODUCT SPEC	SIZE: A1	
2. PLC ± .005	3. PLC ± .005	APPLICATION SPEC	CAGE CODE: 06090	
4. PLC ± .005	ANGLES ± .005	WEIGHT: ---	DRAWING NO: MTCPQKXXXXXXXX	
MATERIAL: ---	FINISH: ---	CUSTOMER DRAWING	SCALE: NTS	SHEET 2 OF 3

TABLE IV: MTCP CRIMP INSERTS					
CODE	GENDER	CONN. SIZE	CONTACT SIZE	TYPE	PART NUMBER
2	PIN	1 INCH	22	--	MTCP-122-20PQ
	SOCKET	1 INCH	22	--	MTCP-122-20S
6	PIN	1 INCH	16	--	MTCP-116-05P1 (*)
	SOCKET	1 INCH	16	--	MTCP-116-05S1 (*)
22	PIN	2 INCH	22	PRIMARY	MTCP-122-20PQ1
	SOCKET	2 INCH	22	PRIMARY	MTCP-122-20S1
	PIN	2 INCH	22	SECONDARY	MTCP-122-20PQ2
	SOCKET	2 INCH	22	SECONDARY	MTCP-122-20S2
26	PIN	2 INCH	22	PRIMARY	MTCP-122-20PQ1
	SOCKET	2 INCH	22	PRIMARY	MTCP-122-20S1
	PIN	2 INCH	16	SECONDARY	MTCP-116-05P2
	SOCKET	2 INCH	16	SECONDARY	MTCP-116-05S2
62	PIN	2 INCH	16	PRIMARY	MTCP-116-05P1
	SOCKET	2 INCH	16	PRIMARY	MTCP-116-05S1
	PIN	2 INCH	22	SECONDARY	MTCP-122-20PQ2
	SOCKET	2 INCH	22	SECONDARY	MTCP-122-20S2
66	PIN	2 INCH	16	PRIMARY	MTCP-116-05P1
	SOCKET	2 INCH	16	PRIMARY	MTCP-116-05S1
	PIN	2 INCH	16	SECONDARY	MTCP-116-05P2
	SOCKET	2 INCH	16	SECONDARY	MTCP-116-05S2

(*) SIZE 16 INSERTS FOR THE 1" (ONE INCH) SHELL ARE IDENTICAL TO THE PRIMARY INSERTS FOR THE 2" (TWO INCH) SHELL. THIS APPLIES TO THE PLUG AND RECEPTACLE CONFIGURATION OF SIZE 16 INSERTS.

TABLE V: MTCP CONNECTOR SHELLS		
SHELL	SIZE	PART NUMBER
PLUG	1"	MTC100Q-SH1-P22*
	2"	MTC100Q-SH2-P22*
RECEP.	1"	MTC100Q-SH1-R22*
	2"	MTC100Q-SH2-R22*
RECEP.	1"	MTC100Q-SH1-F22*
	2"	

* "B" SIDE MARKING

MTCP CRIMP CONNECTOR TOOLS				
COMPONENT	SIZE	TOOL TYPE	TOOL P/N	MANUFACTURER
INSERTS	22	INS./EXTR. METAL	CTA-0161	RAYCHEM CORP.
	16	INS./EXTR. METAL	CTA-0161	RAYCHEM CORP.
CONTACTS	22	INS./EXTR. PLASTIC	CTA-1160	RAYCHEM CORP.
	22	EXTRACTION METAL	ATBD 2062	ASTRO TOOL CO.
	22	INSERTION METAL	ATBD 1062	ASTRO TOOL CO.
	16	INS./EXTR. PLASTIC	M81969/14-03	MIL. SPEC.
	16	EXTRACTION METAL	DRK83-16	DANIELS MFG. CO.
	16	INSERTION METAL	DAK83-16	DANIELS MFG. CO.
	22	CRIMP BASIC	M22520/2-01	MIL. SPEC.
	22	PIN POSITIONER	CE-1605900	RAYCHEM CORP.
			K817-11	DANIELS MFG. CO.
	22	SOCKET POSITIONER	CE-1606000	RAYCHEM CORP.
			K818-11	DANIELS MFG. CO.
	16	CRIMP BASIC	M22520/1-01	MIL. SPEC.
	16	PIN POSITIONER	M22520/1-04	MIL. SPEC.
	16	SOCKET POSITIONER	M22520/1-04	MIL. SPEC.

RECEPTACLE SHELL COUPLING ATTACHMENT SCREW = 7/64 ALLEN WRENCH
 PLUG SHELL COUPLING DRIVER = 7/64 ALLEN OR FLAT BLADE SCREWDRIVER
 STRAIN RELIEF CABLE CLAMPS = #1 PHILLIPS SCREWDRIVER

GROUNDING BLOCK CONNECTOR				
CONTACTS	SIZE	TOOL TYPE	TOOL P/N	MANUFACTURER
	22D	INS./EXTR. PLASTIC	M81969/14-01	MIL. SPEC.
	22D	CRIMP BASIC	M22520/2-01	MIL. SPEC.
	22D	PIN POSITIONER	M22520/2-09	MIL. SPEC.

GROUNDING BLOCK ATTACHMENT SCREW = #1 PHILLIPS SCREWDRIVER

TABLE VI: DUST CAPS		
USED WITH	SIZE	PART NUMBER
PLUG	1"	D-659-0060
	2"	D-659-0062
RECEP.	1"	CHA-1603
	2"	CHA-1604

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TOLERANCES UNLESS OTHERWISE SPECIFIED:		APPV M. SPICER	4-20-15		NAME
0. PLC ± - 1. PLC ± - 2. PLC ± - 3. PLC ± - 4. PLC ± - ANGLES ± -		PRODUCT SPEC		MTCP POWER BLOCK QUICK DISCONNECT CONNECTOR KIT	
MATERIAL		APPLICATION SPEC		SIZE	RESTRICTED TO
FINISH		WEIGHT		A1	
		CUSTOMER DRAWING		SCALE	SHEET
				NTS	3 OF 3
				REV	M