

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

PART NO. VARIABLES:

MTCPQKTXXXXXXX

- 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: | | APPROD 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 | | RESTRICTED TO |
| FINISH | | WEIGHT | 0 | SIZE |
| | | A1 06090 | | DRAWING NO |
| | | 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 ± .010 1. PLC ± .010 2. PLC ± .010 3. PLC ± .010 4. PLC ± .010 ANGLES ± .010 | | PRODUCT SPEC: --- | SCALE: NTS | |
| MATERIAL: --- | FINISH: --- | APPLICATION SPEC: --- | SIZE: A1 | REV: M |
| CUSTOMER DRAWING | | WEIGHT: --- | CAGE CODE: 06090 | SHEET 2 OF 3 |
| | | DRAWING NO: --- | PART NO: MTCPQKXXXXXXXX | |

| 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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| DIMENSIONS: INCHES | | CHK M. SPICER 4-20-15 | NAME | |
|  | | APPV M. SPICER 4-20-15 | PRODUCT SPEC | |
| TOLERANCES UNLESS OTHERWISE SPECIFIED: | | APPLICATION SPEC | | |
| 0. PLC ± .005 | | SIZE | | |
| 1. PLC ± .005 | | CAGE CODE | | |
| 2. PLC ± .005 | | DRAWING NO | | |
| 3. PLC ± .005 | | RESTRICTED TO | | |
| 4. PLC ± .005 | | WEIGHT | | |
| ANGLES ± .005 | | A1 06090 | | |
| MATERIAL | | CUSTOMER DRAWING | | |
| FINISH | | SCALE NTS | | |
| | | SHEET 3 OF 3 | | |
| | | REV M | | |