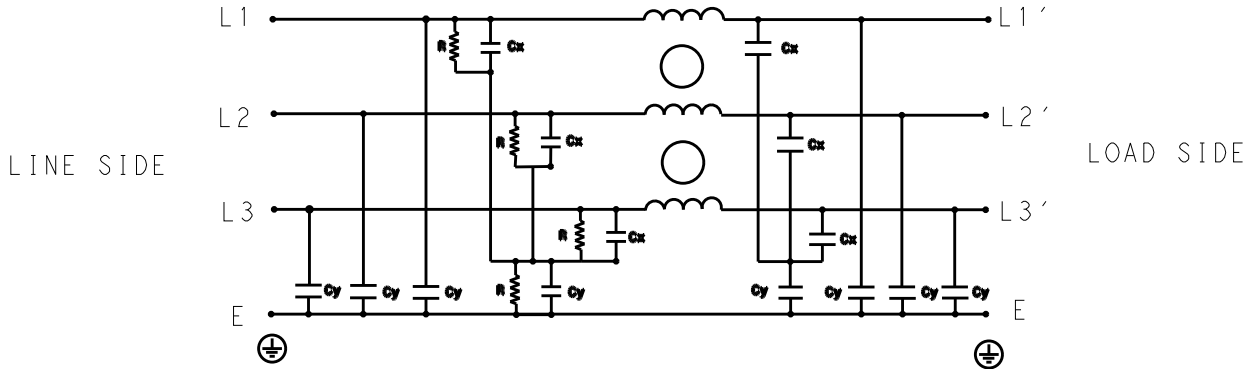


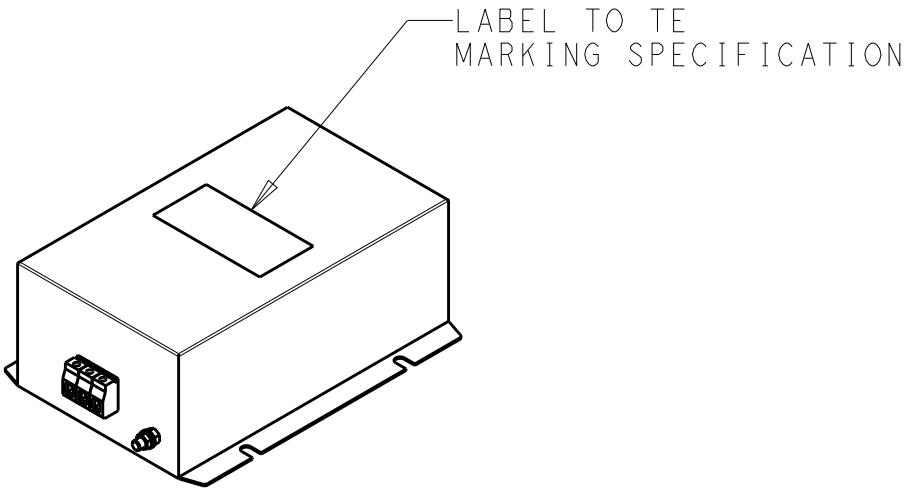
| P | LTR | DESCRIPTION     | DATE      | DWN | APVD |
|---|-----|-----------------|-----------|-----|------|
|   | B   | INITIAL RELEASE | 07JUL2020 | SB  | LI   |
|   |     |                 |           |     |      |
|   |     |                 |           |     |      |



SCHEMATIC

TYPICAL INSERTION LOSS  
COMMON MODE 50/50Ω; DIFFERENTIAL MODE 50/50Ω

| MHz | 0.01 | 0.05 | 0.15 | 0.5 | 1  | 3  | 5  | 10 | 30 |
|-----|------|------|------|-----|----|----|----|----|----|
| CM  | 58   | 54   | 45   | 34  | 31 | 32 | 29 | 42 | 36 |
| DM  | 56   | 51   | 48   | 42  | 40 | 48 | 46 | 52 | 54 |



SAFETY ORGANIZATIONS

THIS FILTER WILL BE FORMALLY RECOGNIZED, CERTIFIED OR APPROVED BY THE LISTED AGENCY. THEREFORE, ALL TEST/REQUIREMENTS SPECIFIED IN THE LATEST REVISION OF THE FOLLOWING AGENCY STANDARDS WILL BE MET:

UL RECOGNIZED\* 50A 440V 50Hz/60Hz 40°C  
CSA CERTIFIED\*\* 50A 440V 50Hz/60Hz 40°C

\* 31 JULY 2020 ; \*\* 31 AUGUST 2020

OPERATING SPECIFICATION

LINE CURRENT/VOLTAGE: 50A, 440VAC  
LINE FREQUENCY: 50/60Hz

MAXIMUM LEAKAGE CURRENT: 18mA @ 230VAC, 50Hz

OPERATING AMBIENT TEMPERATURE RANGE @ RATED CURRENT: -25°C TO +40°C

IN AN AMBIENT, T<sub>a</sub>, HIGHER THAN 40°C, THE MAXIMUM OPERATING CURRENT, I<sub>o</sub>, IS AS FOLLOWS:

$$I_o = I_r \sqrt{\frac{85 - T_a}{45}}$$

RELIABILITY SPECIFICATIONS

STORAGE TEMPERATURE: -40°C TO +85°C  
HUMIDITY: 21 DAYS @ 40°C AND 95% RH

TEST SPECIFICATIONS

INDUCTANCE, NOMINAL: 1.4mH

CAPACITANCE @ 1kHz

LINE TO GROUND, NOMINAL: 1.86μF

LINE TO LINE, NOMINAL: 5μF

DISCHARGE RESISTOR

L/G I.R. 1MΩ 1W

L/L I.R. 2MΩ 1W

L/N I.R. XXX

N/G I.R. XXX

IR (NO DISCHARGE RESISTOR) 20°C, 50% RH AND 100VDC, MIN: 6MΩ

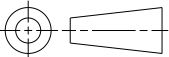
RECOMMENDED RECEIVING INSPECITON HIPOI

LINE TO GROUND FOR 1 MINUTE: 2632VDC

LINE TO LINE FOR 1 MINUTE: 1892VDC

FILTER APPROVAL

THE BEST WAY TO SELECT AND QUALIFY A FILTER IS FOR YOUR ENGINEERING TO TEST THE UNIT IN YOUR EQUIPMENT.

|                                                                                        |  |                                      |                                                                                                       |                    |                             |
|----------------------------------------------------------------------------------------|--|--------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------|-----------------------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT.                                                 |  | DWN<br>SHRICARANA B<br>20FEB2020     |  TE Connectivity |                    |                             |
| DIMENSIONS:<br>mm                                                                      |  | CHK<br>LEO IRUDHAYARAJ<br>20FEB2020  |                                                                                                       |                    |                             |
|   |  | APVD<br>LEO IRUDHAYARAJ<br>20FEB2020 |                                                                                                       |                    |                             |
| TOLERANCES UNLESS OTHERWISE SPECIFIED:                                                 |  | PRODUCT SPEC                         |                                                                                                       |                    |                             |
| 0 PLC ±0.5<br>1 PLC ±0.4<br>2 PLC ±0.4<br>3 PLC ±0.130<br>4 PLC ±0.0500<br>ANGLES ±0.5 |  | APPLICATION SPEC                     | NAME<br>POWER LINE FILTER<br>50KEMS10AFPD                                                             |                    |                             |
| MATERIAL                                                                               |  | WEIGHT                               | SIZE<br>A3                                                                                            | CAGE CODE<br>00779 | DRAWING NO<br>C-1-1609967-7 |
| FINISH                                                                                 |  | CUSTOMER DRAWING                     | SCALE<br>1:4                                                                                          | SHEET<br>1 OF 2    | RESTRICTED TO<br>REV B      |

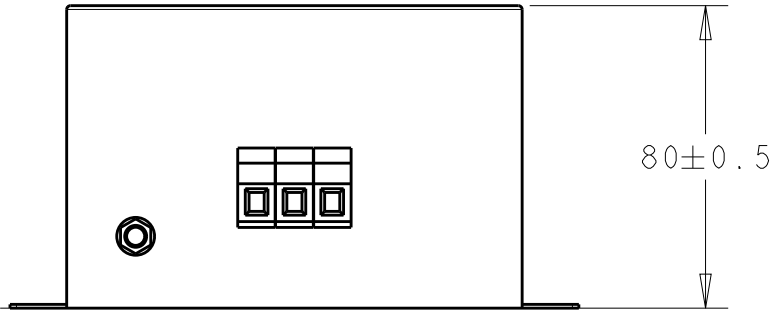
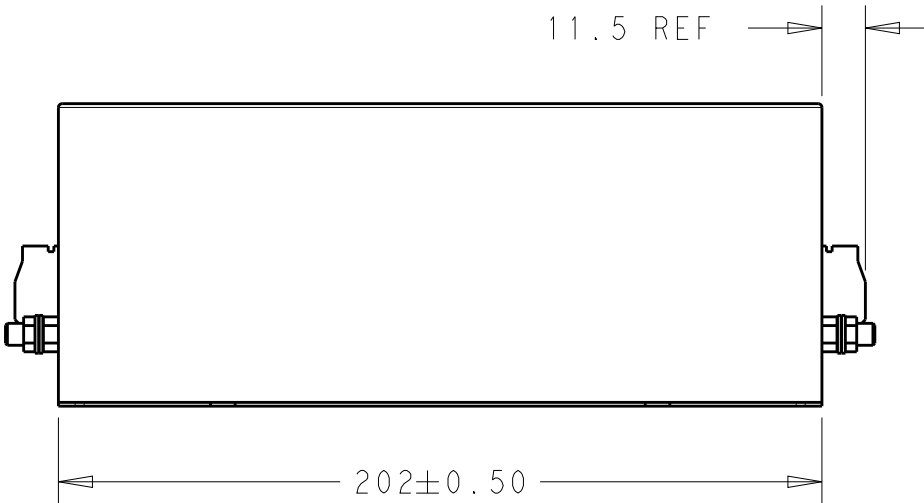
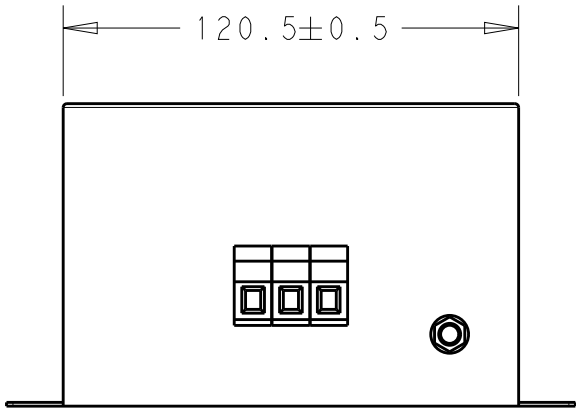
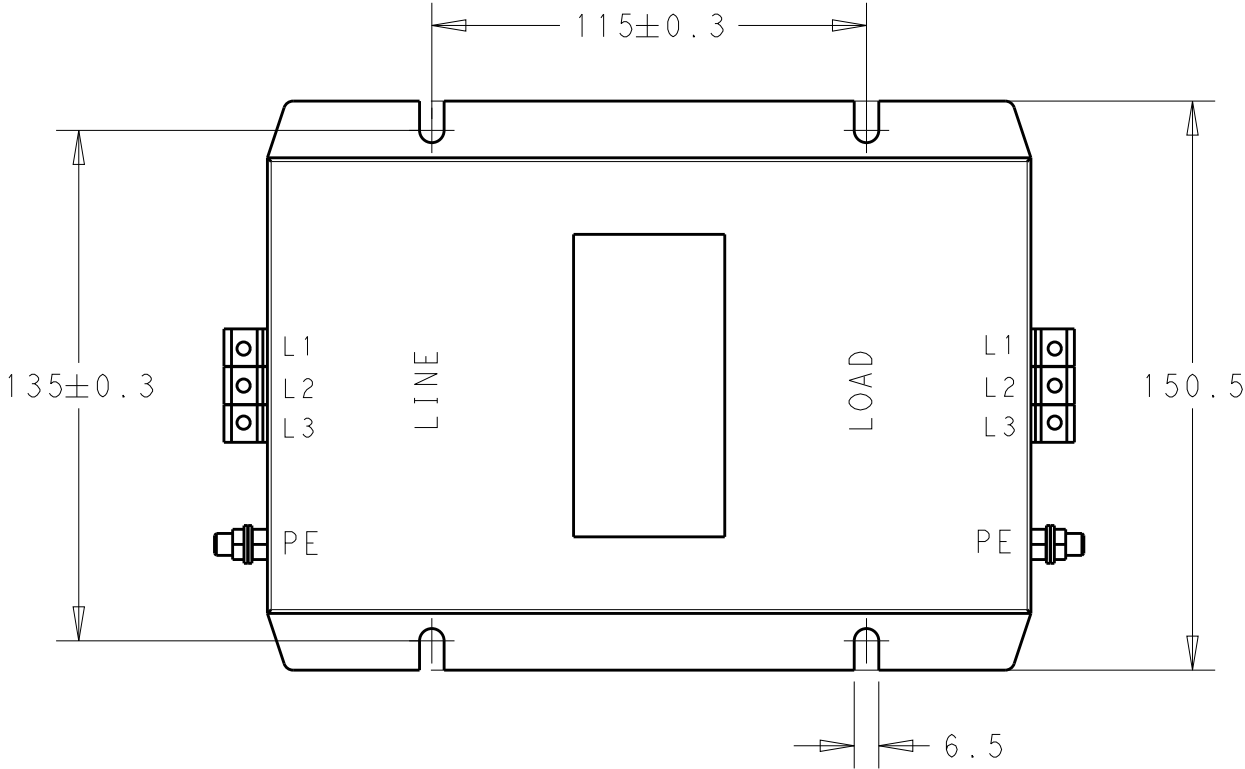
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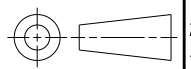
NOTE 1 GROUND CONNECTION:  
DO NOT LOOSEN INNER GROUND NUTS.  
TORQUE OUTER TERMINAL SCREWS: 1.2Nm / 10.8 in.lbs  
TORQUE GROUND NUTS: 2.5-3Nm

NOTE 2 INPUT OUTPUT CONNECTION TERMINAL  
AWG SIZE: 26-8 AWG  
WIRE SECTION: 10 mm<sup>2</sup>  
THREADED BOLT SIZE FOR GROUND: M6

REVISIONS

| P | LTR | DESCRIPTION | DATE | DWN | APVD |
|---|-----|-------------|------|-----|------|
|   |     | SEE SHEET 1 |      |     |      |
|   |     |             |      |     |      |
|   |     |             |      |     |      |
|   |     |             |      |     |      |



|                                                                                       |  |                                                                                         |                                                                                                       |  |  |
|---------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--|--|
| THIS DRAWING IS A CONTROLLED DOCUMENT.                                                |  | DWN<br>SHRICHARANA B<br>20FEB2020                                                       |  TE Connectivity |  |  |
| DIMENSIONS:<br>mm                                                                     |  | CHK<br>LEO IRUDHAYARAJ<br>20FEB2020                                                     |                                                                                                       |  |  |
|  |  | APVD<br>LEO IRUDHAYARAJ<br>20FEB2020                                                    |                                                                                                       |  |  |
|                                                                                       |  | PRODUCT SPEC                                                                            |                                                                                                       |  |  |
|                                                                                       |  | TOLERANCES UNLESS OTHERWISE SPECIFIED:                                                  | NAME<br>POWER LINE FILTER<br>50KEMS10AFPD                                                             |  |  |
|                                                                                       |  | 0 PLC ±0.5<br>1 PLC ±0.5<br>2 PLC ±0.40<br>3 PLC ±0.130<br>4 PLC ±0.0500<br>ANGLES ±0.5 |                                                                                                       |  |  |
| MATERIAL                                                                              |  | FINISH                                                                                  | SIZE<br>A300779                                                                                       |  |  |
|                                                                                       |  |                                                                                         | CAGE CODE<br>C-1-1609967-7                                                                            |  |  |
|                                                                                       |  |                                                                                         | DRAWING NO<br>1-1609967-7                                                                             |  |  |
|                                                                                       |  |                                                                                         | RESTRICTED TO                                                                                         |  |  |
|                                                                                       |  |                                                                                         | SCALE 1:2 SHEET 2 OF 2 REV B                                                                          |  |  |
|                                                                                       |  |                                                                                         | CUSTOMER DRAWING                                                                                      |  |  |