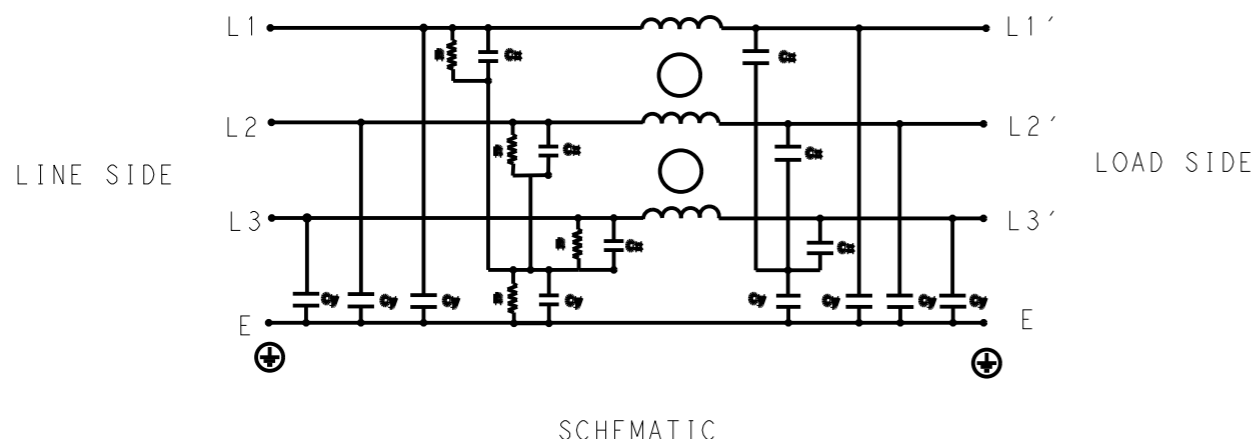


| P | LTR | DESCRIPTION     | DATE      | DWN | APVD |
|---|-----|-----------------|-----------|-----|------|
|   | A   | INITIAL RELEASE | 03APR2021 | BS  | CB   |



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 APPROVED 20A 440V 50Hz/60Hz 40°C  
 CSA APPROVED 20A 440V 50Hz/60Hz 40°C

OPERATING SPECIFICATION

LINE CURRENT/VOLTAGE: 20A, 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: 4.5mH

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 HIPOT

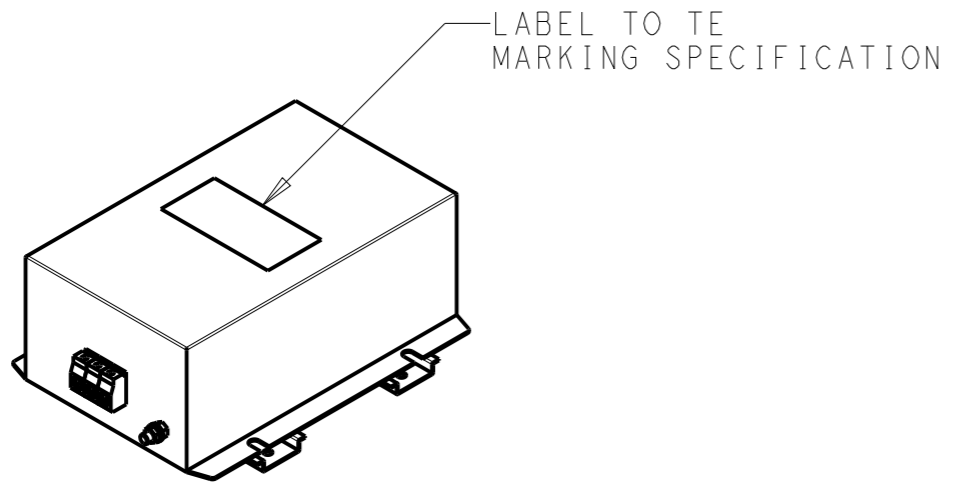
LINE TO GROUND FOR 1 MINUTE: 2632VDC  
 LINE TO LINE FOR 1 MINUTE: 1892VDC

FILTER APPROVAL

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

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  | 56   | 54   | 56   | 53  | 49 | 45 | 38 | 32 | 24 |
| DM  | 31   | 32   | 35   | 55  | 72 | 64 | 60 | 51 | 54 |



|  |  |                               |   |  |
|--|--|-------------------------------|---|--|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |  | DWN 03APR2021<br>BAPAT SAHAS  |   |  |
| DIMENSIONS: mm                         |  | CHK 03APR2021<br>CHRIS BOLLE  |   |  |
| TOLERANCES UNLESS OTHERWISE SPECIFIED: |  | APVD 03APR2021<br>CHRIS BOLLE | NAME<br>POWER LINE FILTER FOR<br>DIN 35 RAIL INSTALLATION<br>20KEMS10AFPDHM |  |
| 0 PLC ±-                               |  | PRODUCT SPEC                  | SIZE  |  |
| 1 PLC ±0.5                             |  | APPLICATION SPEC              | CAGE CODE   |  |
| 2 PLC ±0.40                            |  | WEIGHT                        | DRAWING NO  |  |
| 3 PLC ±0.130                           |  | CUSTOMER DRAWING              | RESTRICTED TO   |  |
| 4 PLC ±0.0500                          |  | SCALE 1:4                     | SHEET 1 OF 2  |  |
| ANGLES ±-                              |  | REV A                         |   |  |
| MATERIAL                               |  | A300779 C-7-1609967-7         |   |  |
| FINISH                                 |  |                               |   |  |

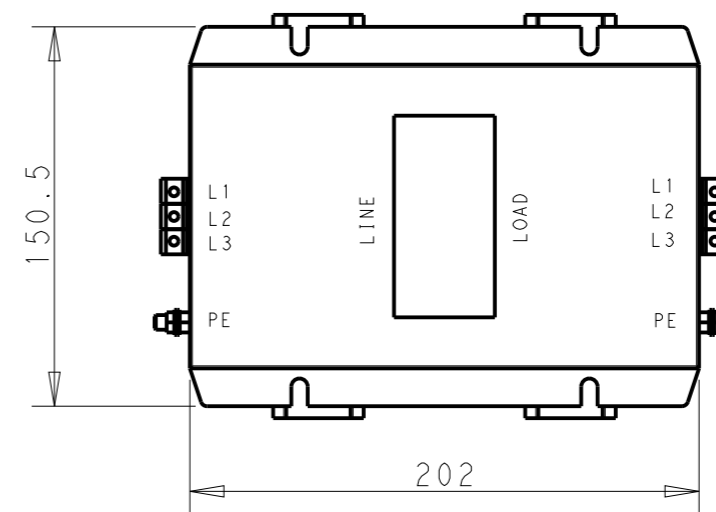
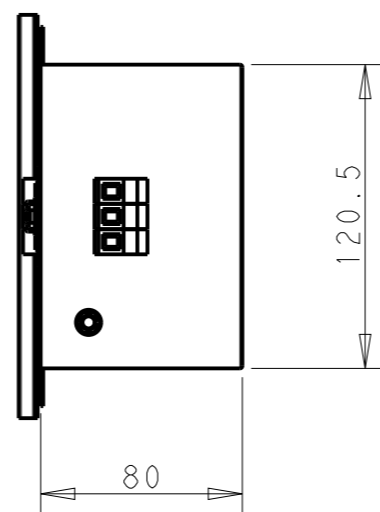
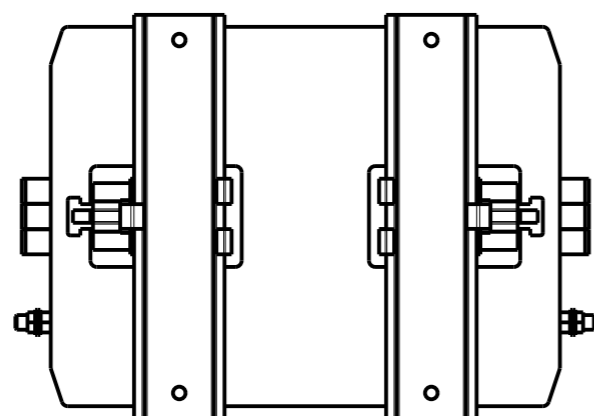
NOTE 1 GROUND CONNECTION:  
 FOR ELECTRICAL SAFETY AND FILTER PERFORMANCE  
 UNIT MUST HAVE A GOOD GROUND CONNECTION.  
 TORQUE OUTER TERMINAL SCREWS: 0.5Nm / 4.5 in.lbs  
 TORQUE GROUND NUTS: 2.5-3Nm

NOTE 2 INPUT OUTPUT CONNECTION TERMINAL  
 AWG SIZE: 26-12 AWG  
 WIRE SECTION: 4 mm<sup>2</sup>  
 THREADED BOLT SIZE FOR GROUND: M6

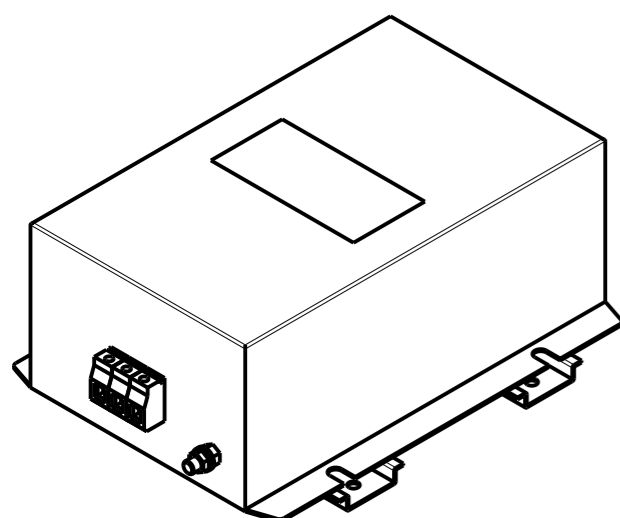
NOTE 3 SUPPLIED WITH DIN RAIL BRACKET

NOTE 4 DRAWINGS SHOWS DIN RAIL FOR  
 REFERENCE ONLY

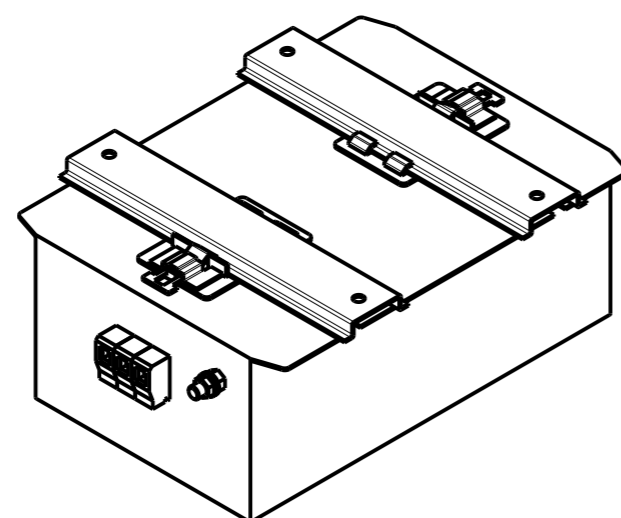
| REVISIONS |     |             |      |     |      |
|-----------|-----|-------------|------|-----|------|
| P         | LTR | DESCRIPTION | DATE | DWN | APVD |
|           |     | SEE SHEET 1 |      |     |      |
|           |     |             |      |     |      |
|           |     |           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



DIN RAIL CHANNEL      DIN 35 BRACKET



FRONT SIDE



REAR SIDE

THIS DRAWING IS A CONTROLLED DOCUMENT.

|             |  |
|-------------|--|
| DIMENSIONS: |  |
| mm          |  |
|             |  |

|  |         |
|--|---------|
| TOLERANCES UNLESS OTHERWISE SPECIFIED: |         |
| 0 PLC                                  | ±-      |
| 1 PLC                                  | ±0.5    |
| 2 PLC                                  | ±0.40   |
| 3 PLC                                  | ±0.130  |
| 4 PLC                                  | ±0.0500 |
| ANGLES                                 | ±-      |

|          |   |
|----------|---|
| MATERIAL | - |
| FINISH   | - |

|        |   |
|--------|---|
| WEIGHT | - |
|--------|---|

|             |           |
|-------------|-----------|
| DWN         | 03APR2021 |
| BAPAT SAHAS |           |
| CHK         | 03APR2021 |
| CHRIS BOLLE |           |
| APVD        | 03APR2021 |
| CHRIS BOLLE |           |

|                  |   |
|------------------|---|
| PRODUCT SPEC     | - |
| APPLICATION SPEC | - |
| WEIGHT           | - |
| CUSTOMER DRAWING |   |

REVISIONS

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



|  |           |               |    |               |  |
|--|-----------|---------------|----|---------------|--|
| NAME   |           |               |    | RESTRICTED TO |  |
| POWER LINE FILTER FOR<br>DIN 35 RAIL INSTALLATION<br>20KEMS10AFPDM |           |               |    | -             |  |
| SIZE   | CAGE CODE | DRAWING NO    |    |               |  |
| A3   | 00779     | C-7-1609967-7 |    |               |  |
| SCALE  |           | SHEET         | OF | REV           |  |
| 1:3  |           | 2             | 2  | A             |  |