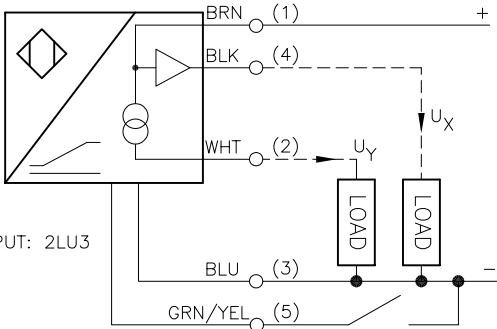
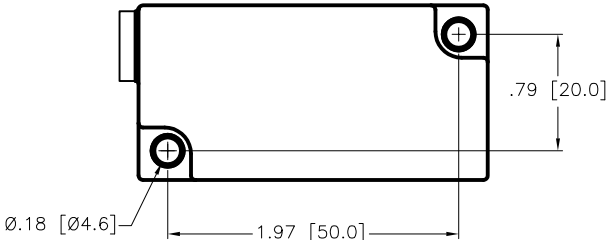
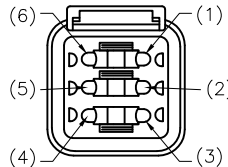
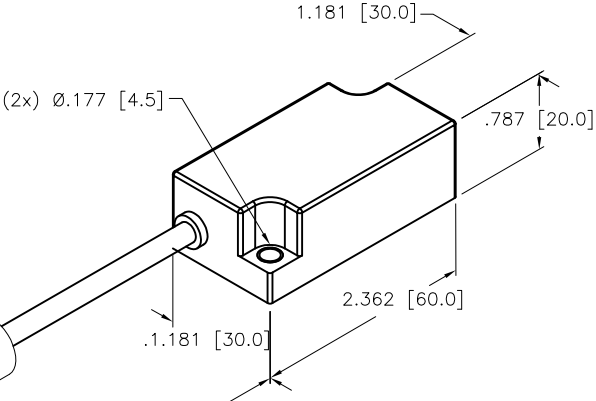


| WIRING DIAGRAM                                                                   |                                                                                                                        | MOUNTING HOLES                                                                     |  | SPECIFICATIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------|----------------|-------------------|-------------|-------------------------|---------|----------------------|--------|--|-------------------------------------------|---------------------|----------------------------------|-------------------|-----------|-----------------|---------|--------------------------|----------|--------------------------|--------------|-----------------------------|--------------|------------------------|------------------------|-----------------|----------------|----------------|--------------|----------------|-------------------------------------|----------------------|---------|---------------|------------------------------------------------------------------------------------------------------------------------|------------------|----------------------|------------|-------|----------------------|-------------------------|------------------|-------------|----------------------|------|
|   |                                                                                                                        |  |  | <table><tr><td>MEASURING RANGE [A-B]</td><td>-85°C to +85°C</td></tr><tr><td>TEMPERATURE DRIFT</td><td>≤ ±0.025%/K</td></tr><tr><td>TEMPERATURE COEFFICIENT</td><td>0.03°/K</td></tr><tr><td>MIN. REPEAT ACCURACY</td><td>≤ 0.2%</td></tr><tr><td></td><td>≤ 0.1%, AFTER A WARM UP TIME OF 0.5 HOURS</td></tr><tr><td>AMBIENT TEMPERATURE</td><td>-30°C to +70°C (-22°F to +158°F)</td></tr><tr><td>OPERATING VOLTAGE</td><td>10-30 VDC</td></tr><tr><td>NO-LOAD CURRENT</td><td>≤ 20 mA</td></tr><tr><td>RATED INSULATION VOLTAGE</td><td>≤ 0.5 kV</td></tr><tr><td>WIRE BREAKAGE PROTECTION</td><td>INCORPORATED</td></tr><tr><td>REVERSE POLARITY PROTECTION</td><td>INCORPORATED</td></tr><tr><td>OVERVOLTAGE PROTECTION</td><td>-48 to 48 VDC [Ub MAX]</td></tr><tr><td>OUTPUT FUNCTION</td><td>4-WIRE, ANALOG</td></tr><tr><td>VOLTAGE OUTPUT</td><td>0.1 to 4.9 V</td></tr><tr><td>VOLTAGE OUTPUT</td><td>SHORT-CIRCUIT PROOF Ub (=10-30 VDC)</td></tr><tr><td>OUTPUT RECOVERY TIME</td><td>≤ 12 ms</td></tr><tr><td>REACTION TIME</td><td>0.05 to 0.1 SECONDS (TIME FOR THE OUTPUT SIGNAL TO ACHIEVE 90% OF FULL SCALE IF THE ANGLE CHANGES FROM -85°C TO +85°C)</td></tr><tr><td>HOUSING MATERIAL</td><td>PLASTIC, PBT-GF20-V0</td></tr><tr><td>CONNECTION</td><td>CABLE</td></tr><tr><td>VIBRATION RESISTANCE</td><td>55 Hz (IN ALL 3 PLANES)</td></tr><tr><td>SHOCK RESISTANCE</td><td>30 g, 11 ms</td></tr><tr><td>DEGREE OF PROTECTION</td><td>IP67</td></tr></table> |  | MEASURING RANGE [A-B] | -85°C to +85°C | TEMPERATURE DRIFT | ≤ ±0.025%/K | TEMPERATURE COEFFICIENT | 0.03°/K | MIN. REPEAT ACCURACY | ≤ 0.2% |  | ≤ 0.1%, AFTER A WARM UP TIME OF 0.5 HOURS | AMBIENT TEMPERATURE | -30°C to +70°C (-22°F to +158°F) | OPERATING VOLTAGE | 10-30 VDC | NO-LOAD CURRENT | ≤ 20 mA | RATED INSULATION VOLTAGE | ≤ 0.5 kV | WIRE BREAKAGE PROTECTION | INCORPORATED | REVERSE POLARITY PROTECTION | INCORPORATED | OVERVOLTAGE PROTECTION | -48 to 48 VDC [Ub MAX] | OUTPUT FUNCTION | 4-WIRE, ANALOG | VOLTAGE OUTPUT | 0.1 to 4.9 V | VOLTAGE OUTPUT | SHORT-CIRCUIT PROOF Ub (=10-30 VDC) | OUTPUT RECOVERY TIME | ≤ 12 ms | REACTION TIME | 0.05 to 0.1 SECONDS (TIME FOR THE OUTPUT SIGNAL TO ACHIEVE 90% OF FULL SCALE IF THE ANGLE CHANGES FROM -85°C TO +85°C) | HOUSING MATERIAL | PLASTIC, PBT-GF20-V0 | CONNECTION | CABLE | VIBRATION RESISTANCE | 55 Hz (IN ALL 3 PLANES) | SHOCK RESISTANCE | 30 g, 11 ms | DEGREE OF PROTECTION | IP67 |
| MEASURING RANGE [A-B]                                                            | -85°C to +85°C                                                                                                         |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| TEMPERATURE DRIFT                                                                | ≤ ±0.025%/K                                                                                                            |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| TEMPERATURE COEFFICIENT                                                          | 0.03°/K                                                                                                                |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| MIN. REPEAT ACCURACY                                                             | ≤ 0.2%                                                                                                                 |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
|                                                                                  | ≤ 0.1%, AFTER A WARM UP TIME OF 0.5 HOURS                                                                              |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| AMBIENT TEMPERATURE                                                              | -30°C to +70°C (-22°F to +158°F)                                                                                       |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| OPERATING VOLTAGE                                                                | 10-30 VDC                                                                                                              |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| NO-LOAD CURRENT                                                                  | ≤ 20 mA                                                                                                                |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| RATED INSULATION VOLTAGE                                                         | ≤ 0.5 kV                                                                                                               |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| WIRE BREAKAGE PROTECTION                                                         | INCORPORATED                                                                                                           |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| REVERSE POLARITY PROTECTION                                                      | INCORPORATED                                                                                                           |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| OVERVOLTAGE PROTECTION                                                           | -48 to 48 VDC [Ub MAX]                                                                                                 |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| OUTPUT FUNCTION                                                                  | 4-WIRE, ANALOG                                                                                                         |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| VOLTAGE OUTPUT                                                                   | 0.1 to 4.9 V                                                                                                           |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| VOLTAGE OUTPUT                                                                   | SHORT-CIRCUIT PROOF Ub (=10-30 VDC)                                                                                    |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| OUTPUT RECOVERY TIME                                                             | ≤ 12 ms                                                                                                                |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| REACTION TIME                                                                    | 0.05 to 0.1 SECONDS (TIME FOR THE OUTPUT SIGNAL TO ACHIEVE 90% OF FULL SCALE IF THE ANGLE CHANGES FROM -85°C TO +85°C) |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| HOUSING MATERIAL                                                                 | PLASTIC, PBT-GF20-V0                                                                                                   |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| CONNECTION                                                                       | CABLE                                                                                                                  |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| VIBRATION RESISTANCE                                                             | 55 Hz (IN ALL 3 PLANES)                                                                                                |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| SHOCK RESISTANCE                                                                 | 30 g, 11 ms                                                                                                            |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
| DEGREE OF PROTECTION                                                             | IP67                                                                                                                   |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |
|  |                                                                                                                        |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                       |                |                   |             |                         |         |                      |        |  |                                           |                     |                                  |                   |           |                 |         |                          |          |                          |              |                             |              |                        |                        |                 |                |                |              |                |                                     |                      |         |               |                                                                                                                        |                  |                      |            |       |                      |                         |                  |             |                      |      |

#### NOTES:

1. "/CS13013" DESIGNATES 6-PIN DEUTSCH CONNECTOR WITH CABLE LENGTH OF 0.15 METERS TO END OF CONNECTOR. CUSTOM PINOUT.

DEUTSCH CONNECTOR:  
RECEPTACLE: DT04-6P-CE02  
CONTACT: 0460-202-16141  
LOCKING WEDGE: W6P  
BOOT: DT6P-BT-BK

2. PIN 5 IS THE TEACH PIN AND PIN 4 IS FOR THE X AXIS

SOURCE DRAWING - FOR REFERENCE ONLY

|                                              |  |                                                                 |  |                                                                                                                            |  |                                                                                                                      |  |
|----------------------------------------------|--|-----------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------|--|
| RELATED DOCUMENTS                            |  | 3RD ANGLE PROJECTION                                            |  | THIS DRAWING IS CONFIDENTIAL AND THE PROPERTY OF TURCK INC. USE OF THIS DOCUMENT WITHOUT WRITTEN PERMISSION IS PROHIBITED. |  | 3000 CAMPUS DRIVE<br>MINNEAPOLIS, MN 55441<br>1-800-544-7769<br>(763) 553-7300<br>(763) 553-0708 fax<br>www.turck.us |  |
| 1.<br>2.<br>3.<br>4.                         |  |                                                                 |  | DRFT RWC                                                                                                                   |  | DATE 03/23/10                                                                                                        |  |
| MATERIAL                                     |  | ALL DIMENSIONS DISPLAYED ON THIS DRAWING ARE FOR REFERENCE ONLY |  | APVD                                                                                                                       |  | SCALE 1=1.3                                                                                                          |  |
| SEE SPECIFICATIONS                           |  | CONTACT TURCK FOR MORE INFORMATION                              |  | UNIT OF MEASUREMENT                                                                                                        |  | DESCRIPTION                                                                                                          |  |
| FINISH                                       |  | DO NOT SCALE THIS DRAWING                                       |  | INCH [ MILLIMETER ]                                                                                                        |  | B2N85H-Q20L60-2LU3/S97/CS13013                                                                                       |  |
| SEE SPECIFICATIONS                           |  |                                                                 |  |                                                                                                                            |  | IDENTIFICATION NO.                                                                                                   |  |
|                                              |  |                                                                 |  |                                                                                                                            |  | 1534083                                                                                                              |  |
|                                              |  |                                                                 |  |                                                                                                                            |  | REV                                                                                                                  |  |
|                                              |  |                                                                 |  |                                                                                                                            |  | D                                                                                                                    |  |
| D UPDATE ID NUMBER PER HARMONIZATION PROJECT |  | CBM 11/06/17                                                    |  |                                                                                                                            |  | FILE: 1534083                                                                                                        |  |
| REV DESCRIPTION                              |  | BY DATE ECO NO.                                                 |  |                                                                                                                            |  | SHEET 1 OF 1                                                                                                         |  |