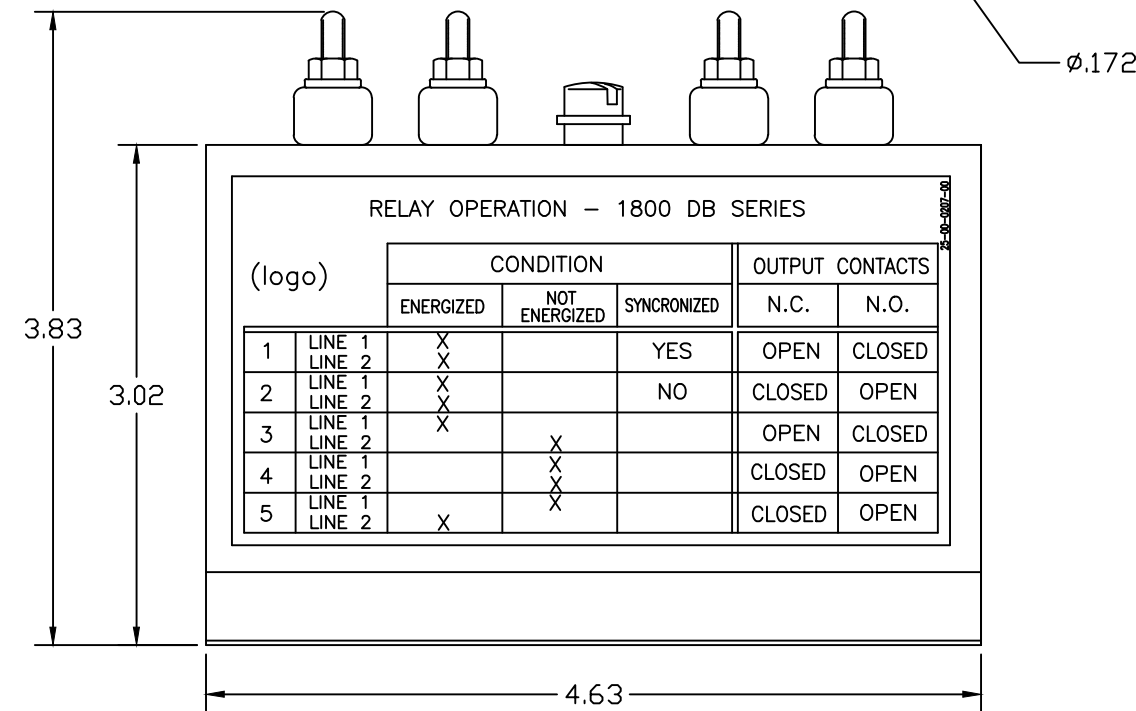
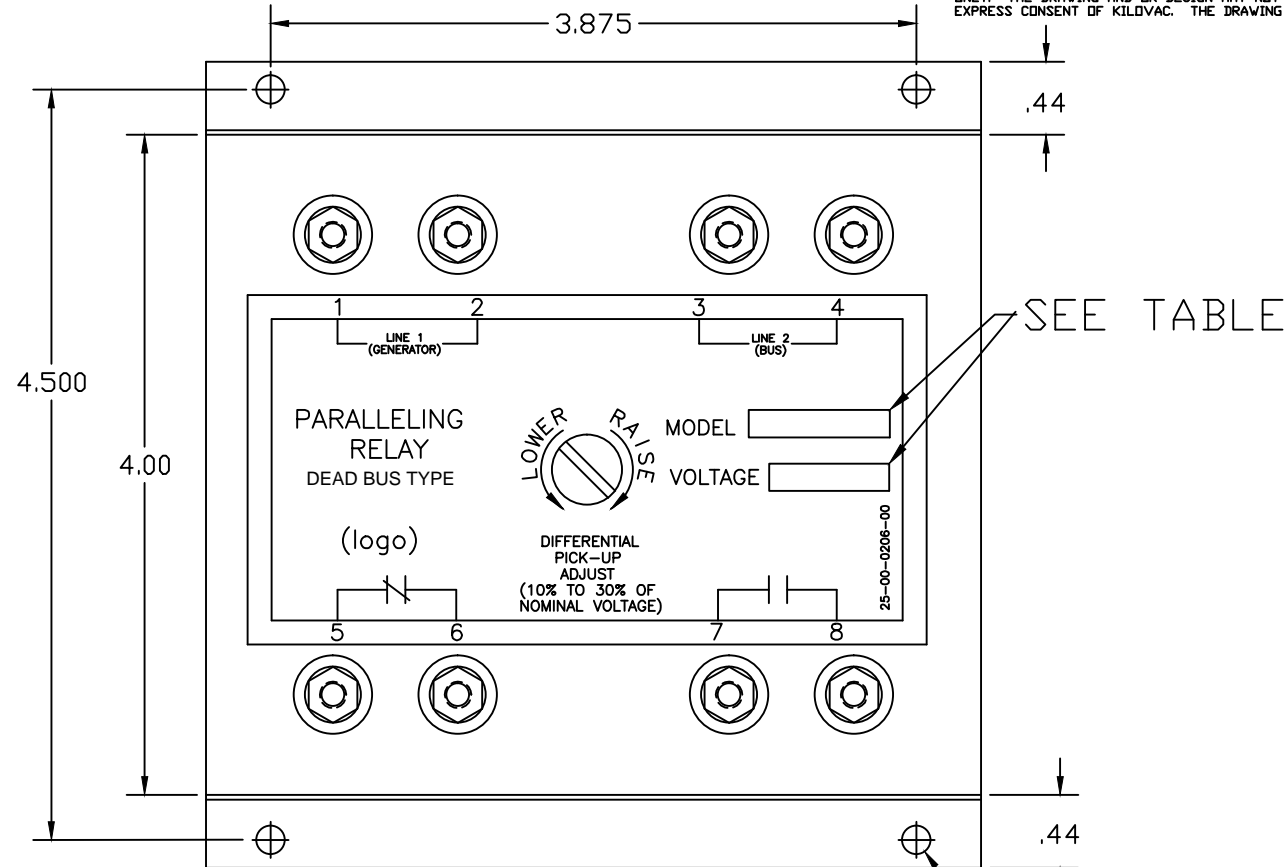


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- NOTES:
- REMOVE BLACK SCREW FOR ACCESS TO THE DIFFERENTIAL PICK-UP ADJUSTMENT.
  - CLOCKWISE ROTATION OF THE PICK-UP ADJUSTMENT WILL INCREASE THE DIFFERENTIAL TRIP POINT.
  - OUTPUT CONTACTS ARE SHOWN IN THE DE-ENERGIZED POSITION.
  - STAMP: GECA P/N M129-B061 ON LOCATION SHOWN, ONLY FOR UNITS SUPPLIED TO GEC ALSTHOM.

SPECIFICATIONS

TO PROVIDE AUTOMATIC PARALLELING (SYNCHRONIZING) OF TWO POWER LINES. THE RELAY SENSES THE PHASE ANGLE DISPLACEMENT AND THE AMPLITUDE DIFFERENCE BETWEEN TWO VOLTAGES AND PERMITS PARALLELING WHEN BOTH VOLTAGES ARE EQUAL AND IN PHASE, OR WHEN ONE LINE IS NOT ENERGIZED, DEAD BUS CONDITION.

LINE VOLTAGE: (SEE TABULATION BELOW)

LINE FREQUENCY: 50 TO 400 HZ.

OPERATION: THE RELAY IS FACTORY ADJUSTED AS FOLLOWS:

- THE RELAY WILL ENERGIZE WHEN THE AMPLITUDE DIFFERENCE BETWEEN THE TWO VOLTAGES IS 17% (10 ELECTRICAL DEGREES) OR LESS.
- THE RELAY WILL ENERGIZE WHEN LINE 1 IS ENERGIZED AND LINE 2 IS DEAD.

TIME DELAY: APPROXIMATELY 0.1 SECOND.

OUTPUT CONTACTS: ONE SET NORMALLY CLOSED, ONE SET NORMALLY OPEN.

CONTACT RATING: 10A RESISTIVE AT 30VDC OR 120VAC, 400HZ.

3 A RESISTIVE AT 120VAC, 60HZ.

PICK-UP ADJUST: SCREWDRIVER ADJUSTABLE OVER THE RANGE OF 10% TO 30% OF THE NOMINAL VOLTAGE. (VECTORAL VOLTAGE OF 5 TO 18 ELECTRICAL DEGREES)

CONSTRUCTION: SOLID STATE SENSOR WITH RELAY OUTPUT ENCLOSED IN A SEALED STEEL CAN.

MILITARY SPECIFICATIONS: NAVY HI-SHOCK, PER MIL-S-901, MIL-R-2033A.

TE #	MODEL	INPUT VOLTAGE
1618065-7	1810DB-SX	120 VAC
2-1618065-0	1820DB-SX	230 VAC
2-1618065-8	1830DB-SX	380 VAC
3-1618065-4	1840DB-SX	460 VAC
4-1618065-2	1850DB-SX	575 VAC
4-1618065-6	1860DB-SX	415 VAC
5-1618065-1	1870DB-SX	277 VAC
5-1618065-9	1880DB-SX	200 VAC
1618065-2	1890DB-SX	90 VAC

OUTPUT CONTACT OPTIONS:

- TWO SETS NORMALLY OPEN: ADD -A TO MODEL NUMBER
- TWO SETS NORMALLY CLOSED: ADD -B TO MODEL NUMBER

NON-MAGNETIC ENCLOSURE OPTION:

UNITS ENCLOSED IN A SEALED NON-MAGNETIC METALIC CANS ARE AVAILABLE. ADD -SS TO MODEL NUMBER.

CD CUSTOMER DRAWING

DRAWING PER ASME/ANSI Y14.5  
THIRD ANGLE PROJECTION  
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED. Block Tolerances are not applied if values are set to zero.  
FRACTIONS DECIMALS ANGLES  
±1/64 .XXX = ±0.01 ± 1°  
±1. @.005 .005  
CAGE CODE 18741 EDITED BY RM EFTV DATE 01-23-14 APPROVED BY TN APRV DATE 01-23-14



550 Linden Ave.  
Carpinteria, CA US 93013  
Internet: www.te.com

TITLE RELAY, 1800DB-SX SERIES

ECD No. 16231 REV. B KILOVAC. NO. SD 1800DB-SX

SCALE 1:1 DD NOT SCALE DRAWING SHEET 1 of 1 SIZE B