



T-TPA TAP POSITION TRANSDUCER



The T-TPA ac reluctance type tap-position transducer converts ac voltages derived from an excited variable reluctance tap-position source into a load independent dc current or voltage signal capable of driving a number of independent instruments. The transducer measures both the excitation and output voltage from the tap-position source and generates an output that is proportional to the quotient of these two signals. Power for the unit is derived from an auxiliary supply.

The unit conforms to IEC 60688. In addition it meets the insulation requirements of IEC 60255-5, clauses 5, 6 and 8 as well as the high frequency disturbance test of IEC 60255-22-1 for Class III test voltage.

Specifications

Input

External ac voltage
Excitation voltage V_e : 60V ac (others on request)
Standard nominal range $0 - V_{nom}$: $0 - V_e$ (others on request)
Accurate range : $0 - 100\% V_{nom}$
Input resistance : 60k Ohms
Overload capacity : $2 \times V_{nom}$ continuous

Output

Linear voltage or current proportional to ratio of input voltage to V_{nom}
Standard nominal outputs : 0-10mA dc <1500 Ohms load
(others on request) : 0-20mA dc <750 Ohms load
: 4-20mA dc <750 Ohms load
: 0-5V dc >2k Ohms load
: 0-10V dc >2k Ohms load
Ripple : <1% pk to pk
Response time : <250ms 0-90%
: <500ms 0-99%

Power Supply

: 24V, 110V, 230/240V, 400/415V ac $\pm 20\%$ 2VA
: 24V dc $\pm 20\%$ or 110V/125V dc (88V-138V) 2W

Accuracy

: Class 1 to IEC 60688
: $\pm 1\%$ of nominal output for specified range

Isolation

Galvanic isolation between input and output and the auxiliary supply circuits
Test voltage : 4kV rms 50Hz for 1 minute
Impulse : 5kV 1.2/50 μ sec waveform

Temperature

Operating : -10°C to $+20^\circ\text{C}$ to $+50^\circ\text{C}$
Storage : -20°C to $+70^\circ\text{C}$

EMC Compliance

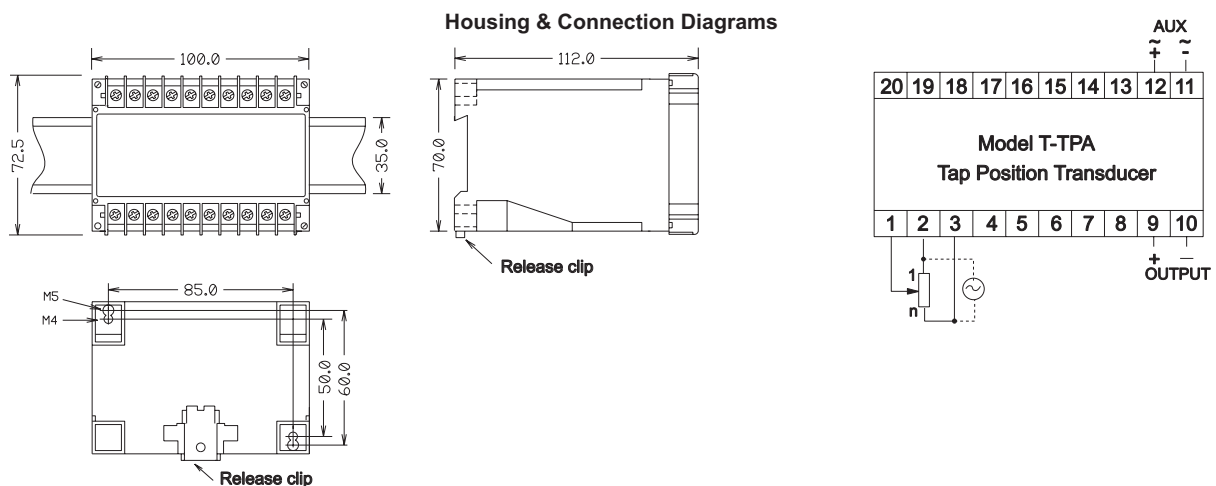
: AS/NZS 61000.6.3:2012

Housing

Self extinguishing grey polycarbonate to IP40 snap mounting on top hat rail DIN EN 50022-35

Terminals

Tinned steel pozi-drive M3 screws with captive square washers suitable for $2 \times 2.5\text{mm}^2$ conductors (max).
Optional terminal covers raise rating from IP10 to IP20



CARREL ELECTRADE LTD

MANUFACTURERS, IMPORTERS AND DISTRIBUTORS OF ELECTRICAL ENGINEERING PRODUCTS
POSTAL ADDRESS: P O BOX 11078, ELLERSLIE 1542, AUCKLAND NEW ZEALAND
FACTORY AND OFFICE: 661 GREAT SOUTH ROAD, PENROSE 1061
TELEPHONE: +64-9-525 1753 FACSIMILE: +64-9-525 1756
CHRISTCHURCH BRANCH: 73B BRISBANE STREET, SYDENHAM
TELEPHONE: 03-366 1242 FACSIMILE: 03-379 1991
EMAIL: sales@carrel-electrade.co.nz WEB: www.carrel-electrade.co.nz