



FEATURES	DEVICE	745	T35	T60	
<b>PROTECTION</b>	Differential	87	■	■	■
	Instantaneous Differential	50/87	■	■	■
	Maximum Number of Windings		3	6	4
	Dual Slope Characteristic		■	■	■
	Harmonic Restraint		■	■	■
	Internal Winding Phase Shift Compensation		■	■	■
	Dynamic CT Ratio-Matching		■	■	■
	CT Mismatch Range		16/1	32/1	32/1
	Unrestrained Operation		■	■	■
	Restricted Earth Fault	87N	Optional	■	■
	Overexcitation	24	■	■	■
	Phase Undervoltage	27	■	■	■
	IOC, Ground/Neutral/Phase/Negative Sequence	50G/N/P/Q	G/N/P	■	G/N/P
	IOC, Sensitive Ground	50SG	■	■	■
	TOC, Ground/Neutral/Phase/Negative Sequence	51G/N/P/Q	G/N/P	P	G/N/Q
	TOC, Sensitive Ground	51SG	■	■	■
	Breaker Failure	50BF	■	■	■
	Custom programmable overcurrent curves		■	■	■
	Overvoltage, Neutral/Phase/Auxiliary	59	■	■	■
	Overvoltage, Symmetrical Component	59N	■	■	■
Current Directional, Ground/Neutral/Phase/Neg. Seq.	67G/NP/Q	G	■	N	
Voltage Transformer Fuse Failure	VTFF	■	■	■	
Under/Overfrequency	81U/O	■	■	■	
Lockout Functionality	86	■	■	■	
Settings Groups		4	6	6	
<b>CONTROL</b>	Non-volatile latches		■	■	■
	Programmable Elements		■	■	■
	Programmable Logic		■	■	■
	FlexElements™		■	■	■
	Digital Inputs		8	80	80
	Contact Outputs (Fixed)		3	■	■
	Contact Outputs (Programmable)		3	64	64
	Virtual Inputs/Outputs		■	32/64	32/64
	Direct Inputs/Outputs		■	32	32
	VFD/LCD Display		■	■	■
	Numerical Keypad		■	■	■
	Trip/Close Coil Supervision		Trip	Trip/Close	Trip/Close
	Breaker Control		■	■	■
	User-Programmable LEDs		■	■	■
	User-Programmable Self Test		■	■	■
	Selector Switch		■	■	■
Digital Counters		■	■	■	
Digital Elements		■	■	■	
IRIG-B Input		■	■	■	
Analog Inputs/Outputs		■	Optional	Optional	
RTD Inputs		1	Optional	Optional	
<b>MONITORING &amp; METERING</b>	Power Factor		■	■	■
	Load Profile Monitoring		■	■	■
	Current - RMS		■	■	■
	Current - Phasor		■	■	■
	Current - Demand		■	■	■
	Current - Unbalance		■	■	■
	Current - Ground Leakage		■	■	■
	Voltage - RMS		■	■	■
	Voltage - Phasor		■	■	■
	Power - Apparent, Real, Reactive		■	■	■
	MW, MVA, Mvar Demand		■	■	■
	Breaker Health Monitoring		■	■	■
	Energy		■	■	■
	Frequency		■	■	■
	Temperature		■	■	■
	Fault Report/Trip Data		■	■	■
	User Programmable Trip Reports		■	■	■
	Event Recorder - Number of Events		40	1024	1024
Oscillography - Cycles @ Sampling Rate		64 @ 12	93.5 @ 16	93.5 @ 16	
Trip Counters		■	■	■	
Data Logger		■	■	■	
Test Mode with auxiliary contacts		■	■	■	
<b>COMMUNICATIONS</b>	RS232 Port		■	■	■
	RS485 Port		■	■	■
	RS422 Port		■	Optional	Optional
	Ethernet Port		■	Optional	Optional
	Fiber Optic Port		■	Optional	Optional
	ModBus Protocol		■	■	■
	ModBus User Map		■	■	■
	DNP3 Protocol		■	■	■
	EGD Protocol		■	■	■
	Peer-to-peer communication (GOOSE)		■	■	■
	IEC 61850 Protocol		■	■	■
	Simple Network Time Protocol		■	■	■
TCP/IP		■	■	■	

\* For the most current comparison list, access us online at: [www.GEMultilin.com/selector/transformer.pdf](http://www.GEMultilin.com/selector/transformer.pdf)