

# Standard specifications

## MEDIMULseries (MEIDEN multi-function digital relay)

Functions	Specifications			(*)							
	Current set values for a 5A rated CT only and divide by 5 for a 1A CT			R1	R2	R3	R4	B1	B2	F1	F2
				HV incoming substations	Main transformer secondary	MV incoming 1	MV incoming 2	Bus (for EVT)	Bus (for ZPD)	Feeder (for EVT)	Feeder (for ZPD)
Protection elements	Device	Setting range	Operating time								
	51L	1.0 to 8.0 A, lock (steps of 0.1 A)	N = 0.5 to 10.0 (steps of 0.1) 3 characteristics (inverse, long, ultra)	○3	○2	○2	○2			○2	○2
	51H	1.0 to 80 A, lock (steps of 1A)	0.04 to 1.00 s, definite time (steps of 0.01 s)	○3	○2	○2	○2			○2	○2
	51G	0.1 to 2.0 A, lock (steps of 0.1 A)	0.05 to 1.00 s, definite time (steps of 0.01 s) with malfunction countermeasure against inrush current	○							
	27	10 to 110 V, lock (steps of 1 V)	0.05 to 10.00 s, definite time (steps of 0.05 s)		○	○	○3	○3	○3		
	59	100 to 150 V, lock (steps of 1 V)	0.1 to 10.0 s, definite time (steps of 0.1 s)		○	○	○	○	○		
	64 (EVT)	3 to 80 V, lock (steps of 1 V)	0.2 to 30.0 s, definite time (steps of 0.1 s)		○			○		○	
	64 (ZPD)	30 to 400 mV, lock (steps of 5 mV)	0.2 to 30.0 s, definite time (steps of 0.1 s)			○			○		○
	67G (EVT)	Io = 1.0 to 6.0 mA, lock ZCT secondary (steps of 0.1 mA) Vo: 3 to 80 V (steps of 1 V) φ: Advance of 0 to 80° (steps of 1°)	0.1 to 2.0 s, definite time (steps of 0.1 s)								○
67G (ZPD)	Io = 1.0 to 6.0 mA, lock ZCT secondary (steps of 0.1 mA) Vo: 30 to 400 mV (steps of 5 mV) Vo: 3 to 80 V (steps of 1 V)	0.1 to 2.0 s, definite time (steps of 0.1 s)									○
Measuring	Item	Measuring range	Class, response								
	Current	CT primary rated current x (0.03 to 1.99) A	Class 1.5, response: 0.5 s	○3	○3	○3	○3			○3	○3
	Voltage	VT primary rated voltage x (0.03 to 1.40) kV	Class 1.5, response: 0.5 s		○	○	○3	○3	○3		
	Zero phase voltage	1.0 V to 130.0 V at EVT third voltage	Response: 0.5 s		○			○		○	
	Zero phase voltage	6.0 to 600.0 mV at ZPD secondary voltage	Response: 0.5 s			○			○		○
	Maximum zero phase voltage	EVT primary rated voltage x (0.03 to 1.40) kV	Class 1.5 response: 5 cycles		○			○			
	Maximum zero phase voltage	ZPD primary rated voltage x (0.03 to 1.40) kV	Response: 5 cycles			○			○		
	Leakage current (residual)	CT secondary rated current (A) x (200 to 400) mA	Response: 0.5 s	○							
	Leakage current (ZCT)	0.10 to 30.00 mA at ZCT secondary current	Response: 0.5 s							○	○

Note: \* of O\* indicates the number of phases.

### (\*) Type list

Abbreviations	R1	R2	R3	R4	B1	B2	F1	F2
Application	HV incoming (residual 51 G)	Main transformer secondary, MV generator (for EVT)	MV incoming, MV generator (for ZPD)	MV main transformer secondary	Bus (for EVT)	Bus (for ZPD)	Feeder (for EVT)	Feeder (for ZPD)
Type (5 A rating)	MR63M-01	MR63M-02	MR63M-03	MR63M-04	MB63M-01	MB63M-02	MF63M-01	MF63M-02
Type (1 A rating)	MR63M-01A	MR63M-02A	MR63M-03A	MR63M-04A			MF63M-01A	MF63M-02A