

Electronic trip unit VL150 UL (DG frame) to VL1600 UL (PG frame) – functional overview

Order No. supplement	Trip unit/model	System protection	Starter protection	Generator protection	Function	Setting options				
						L Overload protection	S ¹⁾ Short-circuit protection (short-time delayed)		I ¹⁾ Short-circuit protection (instantaneous)	G Ground-fault protection
						$I_r = \times I_n$	$I_{sd} = \times I_r$	t_{sd} [s]	$I_l = \times I_n$	$I_g = \times I_n$
KJ	M	--	✓	--	I	--	--	--	3-6	--
KK	M	--	✓	--	I	--	--	--	4-10	--
KL	M	--	✓	--	I	--	--	--	7-16	--
KN	525 (corresponds to TM) ²⁾	✓	--	--	LI	--	--	--	5-10	--
GB	545 (corresponds to ETU10)	✓	--	--	LI	0.4-1	--	--	1.25-11	--
GD	545 (corresponds to ETU12)	✓	--	--	LIG	0.4-1	--	--	1.25-11	1
GE	545 (corresponds to ETU20)	✓	--	✓	LSI	0.4-1	1.5-10	0-0.5	11	--
GH	545 (corresponds to ETU22)	✓	--	✓	LSIG	0.4-1	1.5-10	0-0.5	11	1
JH	576 (corresponds to LCD ETU 40)	✓	--	--	LI, LSI	0.4-1	1.25-10	0-0.5	1.25-11	--
JM	576 (corresponds to LCD ETU 42)	✓	--	--	LSIG	0.4-1	1.25-10	0-0.5	1.25-11	0.4-1 ³⁾

Order No. supplement	Trip unit/model	Thermal image	Phase failure	Communication-capable	Ground-fault protection	Number of poles	I^2t (ON/OFF)	Trip class (t_c)	Time-lag class (t_R)	Thermo-magnetic trip unit	Magnetic trip unit	Solid-state trip unit	LCD display
KJ	M	--	--	--	--	3	--	--	--	--	✓	--	--
KK	M	--	--	--	--	3	--	--	--	--	✓	--	--
KL	M	--	--	--	--	3	--	--	--	--	✓	--	--
KN	525 (corresponds to TM) ²⁾	✓	--	--	--	3	--	--	--	✓	--	--	--
GB	545 (corresponds to ETU10)	✓	--	--	--	3	--	--	2.5-30	--	--	✓	--
GD	545 (corresponds to ETU12)	✓	--	--	①	3	✓	--	2.5-30	--	--	✓	--
GE	545 (corresponds to ETU20)	✓	--	--	--	3	✓	--	--	--	--	✓	--
GH	545 (corresponds to ETU22)	✓	--	--	①	3	✓	--	--	--	--	✓	--
JH	576 (corresponds to LCD ETU 40)	✓	--	✓	--	3	✓	--	2.5-30	--	--	✓	✓
JM	576 (corresponds to LCD ETU 42)	✓	--	✓	①/②	3	✓	--	2.5-30	--	--	✓	✓

Ground-fault protection

- ① Vectorial summation current formation (4-conductor system)
② Direct detection of ground-fault current in the neutral point of the transformer

1) Size dependent.

2) TM up to $I_n = 1600$ A.

3) t_g 0.1–0.5 s.