

Earth Leakage Protective Relays

BRR type

■ Specifications/BRR type

Series	Rated current *1 (A)	Sensor hole or No. of poles	Rated sensitive current *2 (mA)	Control voltage *3 (V AC)	Tripping time (sec)	Type	
BRR	2-wire: 37 3-wire: 37 4-wire: 27	ø10mm	30	120 240	0.1	BRR01N-012S BRR01N-024S	
			100	120 240		BRR09N-012S BRR09N-024S	
	2-wire: 162 3-wire: 115 4-wire: 115	ø25mm	30	120 240		BRR11N-012S BRR11N-024S	
			100	120 240		BRR19N-012S BRR19N-024S	
	2-wire: 344 3-wire: 298 4-wire: 257	ø40mm	30	120 240 415		BRR21N-012S BRR21N-024S BBR21N-04S	
			100	120 240 415		BRR29N-012S BRR29N-024S BBR29N-04S	
			200	120 240 415		BRR22N-012S BRR22N-024S BBR22N-04S	
			500	120 240 415		BRR25N-012S BRR25N-024S BBR25N-04S	
	400	2-pole		200		120 240 415	BRR42H-212S BRR42H-224S BBR42H-24S
				500		120 240 415	BRR45H-212S BRR45H-224S BBR45H-24S
		3-pole		200		120 240 415	BRR42H-312S BRR42H-324S BBR42H-34S
				500		120 240 415	BRR45H-312S BRR45H-324S BBR45H-34S
4-pole			200	120 240 415	BRR42H-412S BRR42H-424S BBR42H-44S		
			500	120 240 415	BRR45H-412S BRR45H-424S BRR45H-44S		

Notes: *1 Using IV 600V cable.

*2 Non-tripping current is 0.5 times sensitive current.

*3 100/110V or 200/220V is available.

■ Wire size

ZCT sensing hole diameter and applicable cable(IV 600V)

Diameter (mm)	Wire		
	2-wire	3-wire	4-wire
10	3.5mm ²	3.5mm ²	2mm ²
25	38mm ²	22mm ²	22mm ²
40	125mm ²	100mm ²	80mm ²
60	325mm ²	200mm ²	200mm ²
90, 120	500mm ²	500mm ²	500mm ²

Conforming to JIS C 3307.

■ Specifications/RRD type, with conductors

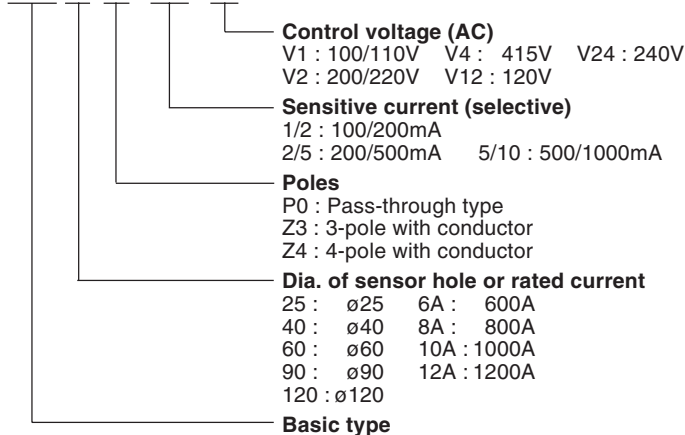
Series	Rated current (A)	No. of poles	Rated sensitive current *1 (mA)	Control voltage *2 (V AC)	Tripping time (sec)	Type
RRD	600	3-pole: 3 4-pole: 4 Replace the □ mark in the type number by the code shown below.	100/200	120 240 415	0.2–2 adjustable	RRD6AZ□-1/2-V12 RRD6AZ□-1/2-V24 RRD6AZ□-1/2-V4
			200/500	120 240 415		RRD6AZ□-2/5-V12 RRD6AZ□-2/5-V24 RRD6AZ□-2/5-V4
			500/1000	120 240 415		RRD6AZ□-5/10-V12 RRD6AZ□-5/10-V24 RRD6AZ□-5/10-V4
	800		100/200	120 240 415		RRD8AZ□-1/2-V12 RRD8AZ□-1/2-V24 RRD8AZ□-1/2-V4
			200/500	120 240 415		RRD8AZ□-2/5-V12 RRD8AZ□-2/5-V24 RRD8AZ□-2/5-V4
			500/1000	120 240 415		RRD8AZ□-5/10-V12 RRD8AZ□-5/10-V24 RRD8AZ□-5/10-V4
	1000		100/200	120 240 415		RRD10AZ□-1/2-V12 RRD10AZ□-1/2-V24 RRD10AZ□-1/2-V4
			200/500	120 240 415		RRD10AZ□-2/5-V12 RRD10AZ□-2/5-V24 RRD10AZ□-2/5-V4
			500/1000	120 240 415		RRD10AZ□-5/10-V12 RRD10AZ□-5/10-V24 RRD10AZ□-5/10-V4
	1200		100/200	120 240 415		RRD12AZ□-1/2-V12 RRD12AZ□-1/2-V24 RRD12AZ□-1/2-V4
			200/500	120 240 415		RRD12AZ□-2/5-V12 RRD12AZ□-2/5-V24 RRD12AZ□-2/5-V4
			500/1000	120 240 415		RRD12AZ□-5/10-V12 RRD12AZ□-5/10-V24 RRD12AZ□-5/10-V4

Notes: *1 The rated sensitive current can be selected by jumper connection.
Non-tripping current 0.5 times sensitive current.

*2 100/110V or 200/220V is available.

● Type number nomenclature, RRD type

RRD 40 P0 - 2/5 -V2



Earth Leakage Protective Relays

RRD type

■ Specifications/RRD, pass-through type

Series	Rated current *1 (A)	Sensor hole (mm)	Rated sensitive current *2 (mA)	Control voltage *3 (V AC)	Tripping time (sec)	Type	
RRD	2-wire: 162 3-wire: 115 4-wire: 115	ø25	100/200	120 240 415	0.2-2 adjustable	RRD25P0-1/2-V12 RRD25P0-1/2-V24 RRD25P0-1/2-V4	
			200/500	120 240 415		RRD25P0-2/5-V12 RRD25P0-2/5-V24 RRD25P0-2/5-V4	
			500/1000	120 240 415		RRD25P0-5/10-V12 RRD25P0-5/10-V24 RRD25P0-5/10-V4	
		2-wire: 344 3-wire: 298 4-wire: 257	ø40	100/200		120 240 415	RRD40P0-1/2-V12 RRD40P0-1/2-V24 RRD40P0-1/2-V4
				200/500		120 240 415	RRD40P0-2/5-V12 RRD40P0-2/5-V24 RRD40P0-2/5-V4
				500/1000		120 240 415	RRD40P0-5/10-V12 RRD40P0-5/10-V24 RRD40P0-5/10-V4
		2-wire: 650 3-wire: 469 4-wire: 469	ø60	100/200		120 240 415	RRD60P0-1/2-V12 RRD60P0-1/2-V24 RRD60P0-1/2-V4
				200/500		120 240 415	RRD60P0-2/5-V12 RRD60P0-2/5-V24 RRD60P0-2/5-V4
				500/1000		120 240 415	RRD60P0-5/10-V12 RRD60P0-5/10-V24 RRD60P0-5/10-V4
	2-wire: 842 3-wire: 842 4-wire: 842	ø90	100/200	120 240 415	RRD90P0-1/2-V12 RRD90P0-1/2-V24 RRD90P0-1/2-V4		
			200/500	120 240 415	RRD90P0-2/5-V12 RRD90P0-2/5-V24 RRD90P0-2/5-V4		
			500/1000	120 240 415	RRD90P0-5/10-V12 RRD90P0-5/10-V24 RRD90P0-5/10-V4		
	2-wire: 842 3-wire: 842 4-wire: 842	ø120	100/200	120 240 415	RRD120P0-1/2-V12 RRD120P0-1/2-V24 RRD120P0-1/2-V4		
			200/500	120 240 415	RRD120P0-2/5-V12 RRD120P0-2/5-V24 RRD120P0-2/5-V4		
			500/1000	120 240 415	RRD120P0-5/10-V12 RRD120P0-5/10-V24 RRD120P0-5/10-V4		

Notes: *1 Using IV 600V cable. (See page 07/110 for reference.)

*2 The rated sensitive current can be selected by jumper connection.
Non-tripping current 0.5 times sensitive current.

*3 100/110V or 200/220V is available.

■ Specifications/EL type

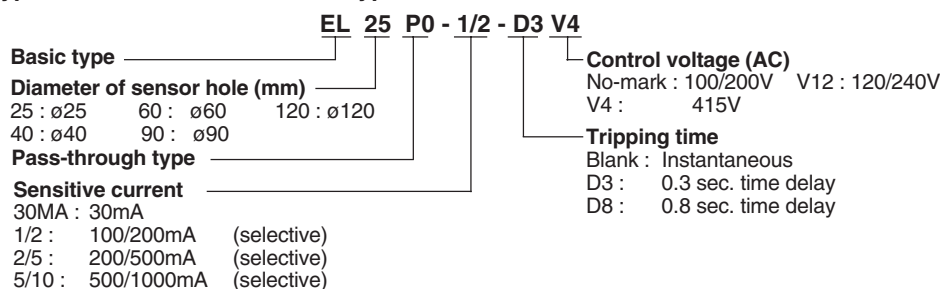
Series	Rated current *1 (A)	Sensor hole (mm)	Rated sensitive current *2 (mA)	Control voltage *3 (V AC)	Tripping time (sec)	120/240V	415V
						Type	Type
EL Instan- taneous	2-wire: 162 3-wire: 115 4-wire: 115	ø25	30 100/200 200/500 500/1000	120/240 415	0.1	EL25P0-30MA-V12 EL25P0-1/2-V12 EL25P0-2/5-V12 EL25P0-5/10-V12	EL25P0-30MA-V4 EL25P0-1/2-V4 EL25P0-2/5-V4 EL25P0-5/10-V4
	2-wire: 344 3-wire: 298 4-wire: 257	ø40	30 100/200 200/500 500/1000			EL40P0-30MA-V12 EL40P0-1/2-V12 EL40P0-2/5-V12 EL40P0-5/10-V12	EL40P0-30MA-V4 EL40P0-1/2-V4 EL40P0-2/5-V4 EL40P0-5/10-V4
	2-wire: 650 3-wire: 469 4-wire: 469	ø60	30 100/200 200/500 500/1000			EL60P0-30MA-V12 EL60P0-1/2-V12 EL60P0-2/5-V12 EL60P0-5/10-V12	EL60P0-30MA-V4 EL60P0-1/2-V4 EL60P0-2/5-V4 EL60P0-5/10-V4
	2-wire: 842 3-wire: 842 4-wire: 842	ø90	100/200 200/500 500/1000			EL90P0-1/2-V12 EL90P0-2/5-V12 EL90P0-5/10-V12	EL90P0-1/2-V4 EL90P0-2/5-V4 EL90P0-5/10-V4
	2-wire: 842 3-wire: 842 4-wire: 842	ø120	100/200 200/500 500/1000			EL120P0-1/2-V12 EL120P0-2/5-V12 EL120P0-5/10-V12	EL120P0-1/2-V4 EL120P0-2/5-V4 EL120P0-5/10-V4
EL Time delay	2-wire: 162 3-wire: 115 4-wire: 115	ø25	100/200 200/500 500/1000	120/240 415	0.3	EL25P0-1/2-D3-V12 EL25P0-2/5-D3-V12 EL25P0-5/10-D3-V12	EL25P0-1/2-D3-V4 EL25P0-2/5-D3-V4 EL25P0-5/10-D3-V4
	2-wire: 344 3-wire: 298 4-wire: 257	ø40	100/200 200/500 500/1000			EL40P0-1/2-D3-V12 EL40P0-2/5-D3-V12 EL40P0-5/10-D3-V12	EL40P0-1/2-D3-V4 EL40P0-2/5-D3-V4 EL40P0-5/10-D3-V4
	2-wire: 650 3-wire: 469 4-wire: 469	ø60	100/200 200/500 500/1000			EL60P0-1/2-D3-V12 EL60P0-2/5-D3-V12 EL60P0-5/10-D3-V12	EL60P0-1/2-D3-V4 EL60P0-2/5-D3-V4 EL60P0-5/10-D3-V4
	2-wire: 842 3-wire: 842 4-wire: 842	ø90	100/200 200/500 500/1000			EL90P0-1/2-D3-V12 EL90P0-2/5-D3-V12 EL90P0-5/10-D3-V12	EL90P0-1/2-D3-V4 EL90P0-2/5-D3-V4 EL90P0-5/10-D3-V4
	2-wire: 842 3-wire: 842 4-wire: 842	ø120	100/200 200/500 500/1000			EL120P0-1/2-D3-V12 EL120P0-2/5-D3-V12 EL120P0-5/10-D3-V12	EL120P0-1/2-D3-V4 EL120P0-2/5-D3-V4 EL120P0-5/10-D3-V4
	2-wire: 162 3-wire: 115 4-wire: 115	ø25	100/200 200/500 500/1000		0.8	EL25P0-1/2-D8-V12 EL25P0-2/5-D8-V12 EL25P0-5/10-D8-V12	EL25P0-1/2-D8-V4 EL25P0-2/5-D8-V4 EL25P0-5/10-D8-V4
	2-wire: 344 3-wire: 298 4-wire: 257	ø40	100/200 200/500 500/1000			EL40P0-1/2-D8-V12 EL40P0-2/5-D8-V12 EL40P0-5/10-D8-V12	EL40P0-1/2-D8-V4 EL40P0-2/5-D8-V4 EL40P0-5/10-D8-V4
	2-wire: 650 3-wire: 469 4-wire: 469	ø60	100/200 200/500 500/1000			EL60P0-1/2-D8-V12 EL60P0-2/5-D8-V12 EL60P0-5/10-D8-V12	EL60P0-1/2-D8-V4 EL60P0-2/5-D8-V4 EL60P0-5/10-D8-V4
	2-wire: 842 3-wire: 842 4-wire: 842	ø90	100/200 200/500 500/1000			EL90P0-1/2-D8-V12 EL90P0-2/5-D8-V12 EL90P0-5/10-D8-V12	EL90P0-1/2-D8-V4 EL90P0-2/5-D8-V4 EL90P0-5/10-D8-V4
	2-wire: 842 3-wire: 842 4-wire: 842	ø120	100/200 200/500 500/1000			EL120P0-1/2-D8-V12 EL120P0-2/5-D8-V12 EL120P0-5/10-D8-V12	EL120P0-1/2-D8-V4 EL120P0-2/5-D8-V4 EL120P0-5/10-D8-V4

Notes: *1 Using IV 600V cable. (See page 07/110 for reference.)

*3 100/110V or 200/220V is available.

*2 Non tripping current is 0.5 times sensitive current.

● Type number nomenclature, ELtype



Earth Leakage Protective Relays EL types

■ Specifications/EL type, UL 1053 recognized [UL File No. E176596]

Series	Sensor hole (mm)	Rated sensitive current (mA)	Control voltage	Tripping time (sec)	Type		
					24 VAC/DC Control	100/200 VAC Control	120/240 VAC Control
EL	ø25	30 50/100 100/200 200/500 500/1000	24 VAC/DC 100/200 VAC 120/240 VAC	0.1	EL25P0-30MA-AD24-00415UL	EL25P0-30MA-00415UL	EL25P0-30MA-V12-00415UL
		EL25P0-05/1-AD24-00415UL			EL25P0-05/1-00415UL	EL25P0-05/1-V12-00415UL	
		EL25P0-1/2-AD24-00415UL			EL25P0-1/2-00415UL	EL25P0-1/2-V12-00415UL	
		EL25P0-2/5-AD24-00415UL			EL25P0-2/5-00415UL	EL25P0-2/5-V12-00415UL	
		EL25P0-5/10-AD24-00415UL			EL25P0-5/10-00415UL	EL25P0-5/10-V12-00415UL	
	ø40	30 50/100 100/200 200/500 500/1000			EL40P0-30MA-AD24-00415UL	EL40P0-30MA-00415UL	EL40P0-30MA-V12-00415UL
					EL40P0-05/1-AD24-00415UL	EL40P0-05/1-00415UL	EL40P0-05/1-V12-00415UL
					EL40P0-1/2-AD24-00415UL	EL40P0-1/2-00415UL	EL40P0-1/2-V12-00415UL
					EL40P0-2/5-AD24-00415UL	EL40P0-2/5-00415UL	EL40P0-2/5-V12-00415UL
					EL40P0-5/10-AD24-00415UL	EL40P0-5/10-00415UL	EL40P0-5/10-V12-00415UL
	ø60	30 50/100 100/200 200/500 500/1000			EL60P0-30MA-AD24-00415UL	EL60P0-30MA-00415UL	EL60P0-30MA-V12-00415UL
					EL60P0-05/1-AD24-00415UL	EL60P0-05/1-00415UL	EL60P0-05/1-V12-00415UL
					EL60P0-1/2-AD24-00415UL	EL60P0-1/2-00415UL	EL60P0-1/2-V12-00415UL
					EL60P0-2/5-AD24-00415UL	EL60P0-2/5-00415UL	EL60P0-2/5-V12-00415UL
					EL60P0-5/10-AD24-00415UL	EL60P0-5/10-00415UL	EL60P0-5/10-V12-00415UL
	ø90	30 50/100 100/200 200/500 500/1000			EL90P0-30MA-AD24-00415UL	EL90P0-30MA-00415UL	EL90P0-30MA-V12-00415UL
					EL90P0-05/1-AD24-00415UL	EL90P0-05/1-00415UL	EL90P0-05/1-V12-00415UL
					EL90P0-1/2-AD24-00415UL	EL90P0-1/2-00415UL	EL90P0-1/2-V12-00415UL
					EL90P0-2/5-AD24-00415UL	EL90P0-2/5-00415UL	EL90P0-2/5-V12-00415UL
					EL90P0-5/10-AD24-00415UL	EL90P0-5/10-00415UL	EL90P0-5/10-V12-00415UL
	ø115	30 50/100 100/200 200/500 500/1000			EL115P0-30MA-AD24-00415UL	EL115P0-30MA-00415UL	EL115P0-30MA-V12-00415UL
					EL115P0-05/1-AD24-00415UL	EL115P0-05/1-00415UL	EL115P0-05/1-V12-00415UL
					EL115P0-1/2-AD24-00415UL	EL115P0-1/2-00415UL	EL115P0-1/2-V12-00415UL
					EL115P0-2/5-AD24-00415UL	EL115P0-2/5-00415UL	EL115P0-2/5-V12-00415UL
					EL115P0-5/10-AD24-00415UL	EL115P0-5/10-00415UL	EL115P0-5/10-V12-00415UL

● Type number nomenclature, EL type, UL 1053 recognized

EL 25 P0 - 30MA - AD24 - 00415 UL

