

Digital Type Ground Overcurrent Relay

DUT EH, DUT ET

DUT EN, DUT EM (Noise immunity conforming to standard of B-402)

★Information required with your inquiry or order. The pitch in parentheses and lock setting "L" need not be specified.

Application		Detection of ground fault (Mainly resistance grounded line system)							
Principle and name		Digital type ground overcurrent relay							
Classification	Auxiliary energizing source	Input	★Type *11						
Unit standard structure type	DC	1	DUTUEHAS-2	DUTUEHAK-2	DUTUEHAA-2	DUTUETAS-2	DUTUETAK-2	DUTUETAA-2	
	AC		DUTAEHAS-2	DUTAEHAK-2	DUTAEHAA-2	DUTAETAS-2	DUTAETAK-2	DUTAETAA-2	
DQ series replacement type *1	DC	1	DUTREHAS-2	DUTREHAK-2	DUTREHAA-2	DUTRETAS-2	DUTRETAK-2	DUTRETAA-2	
	AC		DUTBEHAS-2	DUTBEHAK-2	DUTBEHAA-2	DUTBETAS-2	DUTBETAK-2	DUTBETAA-2	
Unit standard structure type *10	DC	1	DUTUENAS-2	DUTUENAK-2	DUTUENAA-2	DUTUEMAS-2	DUTUEMAK-2	DUTUEMAA-2	
	AC		DUTAENAS-2	DUTAENAK-2	DUTAENAA-2	DUTAEMAS-2	DUTAEMAK-2	DUTAEMAA-2	
Ratings	★Frequency [Hz]		50, 60						
	★Current [A] AC		1, 5						
	Element		Inverse time-lag		Instantaneous	Independent time-lag			
	Setting range *2	★Setting value [A] AC	1A	0.02 to 0.16 (0.01) -L		0.1 to 0.8 (0.01) -L	0.02 to 0.16 (0.01)		
				0.1 to 0.8 (0.01) -L		0.5 to 4 (0.1) -L	0.1 to 0.8 (0.01)		
				5A	0.1 to 0.8 (0.01) -L		0.5 to 4 (0.1) -L	0.1 to 0.8 (0.01)	
					0.5 to 4 (0.1) -L		2.5 to 20 (0.1) -L	0.5 to 4 (0.1)	
	Time setting		n=0.5 to 50 (n=0.1)		0 to 3s (0.1s) *3	0 to 3s (0.1s) *3			
	Output duration *4 [s]		1±0.1	0.2±0.1	0.2±0.1	1±0.1	0.2±0.1	0.2±0.1	
	Rated burden [VA]		0.4						
Continuous withstand current		100% of rated value							
Auxiliary energizing source *5	★Voltage [V]	DC	100, 110, 125, 200, 220, 250						
		AC	100, 110, 127, 200, 220, 250 50, 60Hz						
	Rated burden	DC	100, 110, 125V rated : 6.5W 200, 220, 250V rated : 8.5W						
		AC	100, 110, 127V rated : 15VA 200, 220, 250V rated : 20VA						
Operation indicators	Display hold function *12		With	With	-	With	With	-	
	DC auxiliary energizing source		LED: Time lag x 1, Instantaneous x 1			LED: Operation x 1			
	AC auxiliary energizing source	1 input	LED: Time lag x 1, Instantaneous x 1			LED: Operation x 1		LED: Operation x 1	
			Magnetic inversion: Time lag x 1, Instantaneous x 1		-	Magnetic inversion: Operation x 1			
2 inputs		-			-				
3 inputs	-			-					
Contacts	Arrangement		Trip: Time lag 1NO ("a" make contact), Instantaneous: 1NO, Alarm: 1NC ("b" break contact), External output: 1NO			Trip: 1NO, Alarm: 1NC, External output: 1NO			
	Limiting making capacity [A]		15 (R-load, 0.5s, 110V DC)						
	Continuous current carrying capacity [A]		5						
	Limiting breaking capacity [VA] DC		10 (L-load, L/R=0.04, 110V DC)						
Characteristics	Operate time		*6		*6, *7		*6, *8		
	Operate value accuracy [%]		*9		±5		*9		
	f2 locking function (f2/f1) [%]		-		15 or more		15 or more		
	Holding factor [%]		5						
Mass [kg]		2							
Outline drawing	Unit standard structure type		Fig. DUT1						
	DQ series replacement type		Fig. DUT2						
Previous relay type		DQAJA1HH	DQAJA1HB	DQAJA1HA	DQARA1HH, DQAWA2HH,G	DQARA1HB, DQAWA2HB,D	DQARA1HA, DQAWA2HA,N		

Notes

- *1 : DQ series replacement relay having the same external terminal arrangement with DQ series relay. DQ series replacement relay with panel mounting adapter that has the same depth with DQ series relay, is also available. For details, contact Fuji.
- *2 : The value in parentheses indicates the pitch, and "L" indicates that the setting is locked. *3 : Zero represents instantaneous operate time (80ms max.).
- *4 : The output duration of 1±0.1s is used in the case of the circuit breaker tripping, and that of 0.2±0.1s is used on other occasions.
- *5 : Power interruption guarantee time of AC auxiliary energizing source is 2s. However, it may exceed 2s depending on input or operating conditions.
- *6 : Refer to "Operate time characteristics".
- *7 : ±5% of max. time setting, or for min. time setting, 80ms max. when 200% input current of operate setting value.
- *8 : ±5% of max. time setting, or for min. time setting, 80ms max. when 300% input current of operate setting value.
- *9 : ±5% in accuracy guaranteed setting range (three times min. of min. operate setting value to max. operate setting value), ±15% for outside the accuracy guaranteed setting range.
- *10 : Noise immunity per B-402 (Digital Protective Relays and Protective Equipment).
- *11 : Refer to the identifications on page 8 for the tenth digit or later of the code symbol.
- *12 : If "S" or "K" is selected for the 8th digit of the code symbol, both LED and magnetic inversion operation indicators are provided with a display hold function. If "A" is selected, the LED indicator has no display hold function.