Grid Solutions

HMA

Self Resetting Hinged Armature Auxiliary Relay.

Description

The HMA relay is a general purpose, hinged armature, self resetting relay. It is housed in a molded TEXTOLITE case for surface mounting, and can be supplied either front or back connected. Back connected models are supplied with a removable front cover, whereas front connected models are supplied without cover or rear studs.

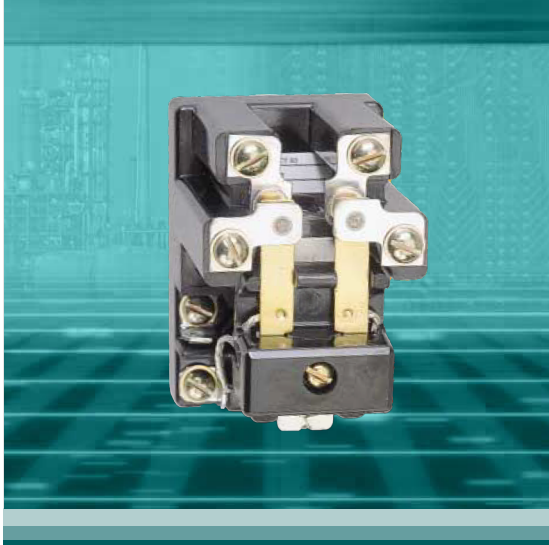
Application

The HMA relay is a high speed auxiliary relay designed for use with high speed circuit breaker. The pick-up time at rated voltage is approximately 2 cycles (on a 60 Hz basis). Relays for DC applications are adjusted to pick up at 60 percent of their rating when cold and 80 percent when hot. Relays for ac application are adjusted to pick up at 80 percent of their rating.

The HMA11A is a back connected relay supplied with cover. The HMA11B is similar except it is front connected and is supplied without cover. The HMA24A is similar to the HMA11A except it is made for semi-flush mounting with a glass cover.

For AC and DC Auxiliary Functions

The HMA25A is similar to the HMA24A except it is surface mounted, back connected with glass cover.



Features and Benefits

- Front or back connected
- Molded Textolite case

Applications

- Contact multiplication

Protection and Control

- High-speed pickup
- Self-resetting

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Rating

The current closing or momen-tary rating of the contact is 30 A for one min. The current carrying or steady-state rating is 12 A.

The interrupting ratings for the various voltages are as follows:

CONTACT CIRCUIT		NONINDUCTIVE		INDUCTIVE	
V	Freq. or Hz	Single Break Amp	Double Break Amp	Single Break Amp	Double Break Amp
6-32	DC	15	30	6	12
48		10	20	3	6
62.5		5	10	1.5	3
110		1.5	3	0.6	1.2
125		1.5	3	0.6	1.2
220		0.3	0.5	0.1	0.3
250		0.3	0.5	0.1	0.3
120	60	20	30	15	15
240		13	25	10	10
120	50	20	30	15	15
240		13	25	10	10

Burdens

The burdens for DC coils are shown in the Selection Guide. The AC burdens are shown in the following table.

AC COILS								
Coil Rating		R_{DC} ±10%	R_{DO} ±10%	X_{DO} ±10%	Z_{DO} ±10%	R_{PU} ±5%	X_{PU} ±5%	Z_{PU} ±5%
V	Hz							
115	60	330	440	864	975	1215	1342	1815
230	60	1300	2580	3310	4180	5160	4500	6900
460	60	5100	7040	13825	15600	19440	21475	29040
115	50	380	503	871	1006	1323	1552	2029
230	50	1500	2010	3480	4025	5300	6200	8120

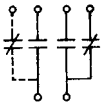
R_{DC} - DC resistance
R_{DO} - AC resistance with armature not picked up
X_{DO} - Inductive reactance with armature not picked up
Z_{DO} - Impedance with armature not picked up

R_{PU} - AC resistance with armature picked up
X_{PU} - Inductive reactance with armature picked up
Z_{PU} - Impedance with armature picked up

Order Code Breakdown

HMA	***	**	
	11A		Back connected with cover
	11B		Front connected without cover
	24A		Semi-flush mounted back connected and cover with glass window
	25A		Surface mounted back connected and cover with glass window
		XX	See group column under selection guide

Selection Guide

MTG.	GROUP	DC VOLT.	VAC 50 Hz	VAC 60 Hz	DC OHMS	CONTACT	APPROX. WT. IN lbs (KG)	
							NET	SHIP
11A	21	6	-	-	15.3	2 N.O. 2 N.C. 	1 (0.5)	2 (0.9)
11A	22	12	-	-	60			
11A	23	24	-	-	230			
11A	24	32	-	-	440			
11A	25	48	-	-	1000			
11A	26	125	-	-	5660			
11A	31	-	-	115	-			
11A	32	-	-	230	-			
11A	41	-	115	-	-			
11A	42	-	330	-	-			
11A	47	250	-	-	930①			
11A	48	-	-	208	-			
11A	53	62.5	-	-	1450			
11A	54	-	-	125	-			
11B	1	6	-	-	15.3			
11B	2	12	-	-	60			
11B	3	24	-	-	230			
11B	4	32	-	-	440			
11B	5	48	-	-	1000			
11B	6	125	-	-	5660			
11B	11	-	-	115	-			
11B	12	-	-	230	-			
11B	16	-	115	-	-			
11B	17	-	330	-	-			
11B	19	250	-	-	930①			
11B	25	62.5	-	-	1450			
11B	26	-	125	-	-			
11B	27	-	-	125	-			
24A	1	-	-	120	-			
24A	2	125	-	-	5660			
24A	3	-	120	-	-			
24A	4	6	-	-	15.3			
24A	5	48	-	-	1000			
25A	1	-	-	125	-			
25A	3	48	-	-	1000			
25A	4	24	-	-	230			

① *Uses 3300 Ω external resistor.*

For more information, visit
gevernova.com/grid-solutions

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GEA-N50210
English
250909