



Power Controller to 40 K Series

221 Weaver Street, Fall River, MA 02720

Tel# 508-676-7345 • 800-879-7918 • Fax# 508-676-7346
www.hbcontrols.com



- Solid State Relay assemblies rated to 40/pole @ 40° C (100% duty cycle)
- Zero cross switching standard
- Relays: UL, CSA, VDE, CE
- Available in 2 or 3 pole configuration
- Finger safe covers standard
- Phase angle & time proportional control optional

OUTPUT SPECIFICATIONS	AC Control		DC Control	
	HBC-125HAK8-2	HBC-125HAK8-3	HBC-125HDK8-2	HBC-125HDK8-3
Operating Voltage (47-63 Hz)	48-530	48-530	48-530	48-530
Load Current Range	.04-40	.04-40	.04-40	.04-40
Transient Overvoltage [Vpk]	1200	1200	1200	1200
Max. Surge Current, (16.6ms) [Apk]	1750	1750	1750	1750
Max. On-State Voltage Drop [Vpk]	1.7	1.7	1.7	1.7
Max. Turn-On	10mS	10mS	½ cycle	½ cycle
Max. Turn-Off Time	40mS	40mS	½ cycle	½ cycle
Max I ² t for Fusing (8.3mS)	12700	12700	12700	12700
Max Off-State Leakage Current [mArms]	10	10	10	10
Power Factor (Min.) with Max. Load	0.5	0.5	0.5	0.5
INPUT SPECIFICATIONS				
Control Voltage Range	90-280Vrms		3-32Vdc	
Max. Turn-On Voltage	90Vrms (60Hz)		3.0	
Min. Turn-Off Voltage	10Vrms		1.0	
Nominal Input Impedance [Ohms]	60KOhms		See*	
Typical Input Current	2mA @ 120Vrms		2.0mAdc	
	4mA @ 240Vrms			

*** Input circuitry incorporates active current limiter**

INPUT OPTIONS (DC Controls only)

Change HBC Prefix To: (Ex: HBC-125DF73B = LPC-125DF73B)

- TP Time proportioning controller (Burst Fire)
Input: 0-10VDC, 0-5VDC, 2-10VDC, 1-5VDC, 4-20mA
Potentiometer, 0-135Ω
(24VAC or DC Power Supply Required)
- TPLP Loop powered time proportioning controller (Burst Fire)
Input: 4-20mA
- LPC Linear phase angle controller
Input: 0-10VDC, 0-5VDC, 2-10VDC, 1-5VDC, 4-20mA,
Potentiometer, 0-135Ω
(24VAC Power Supply Required)

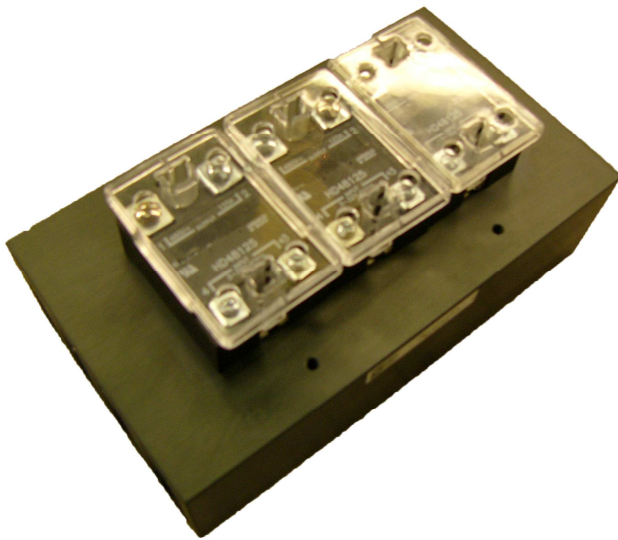
- Options: -D DIN mount
-10 Random turn-on
-WH Wiring harness for multi-pole configurations
-E 24VAC Control (AC input only)
-Z LED input status indicator (DC input only)
-M MOV – External transient voltage suppression
-P Internal transient voltage suppression
-FD Front DIN mount
-CT Current transducer



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OUTPUT SPECIFICATIONS	AC Control		DC Control	
	HBC-6125HAK8-2	HBC-6125HAK8-3	HBC-6125HDK8-2	HBC-6125HDK8-3
Operating Voltage (47-63 Hz)	48-660	48-660	48-660	48-660
Load Current Range	.04-40	.04-40	.04-40	.04-40
Transient Overvoltage [Vpk]	1200	1200	1200	1200
Max. Surge Current, (16.6ms) [Apk]	1750	1750	1750	1750
Max. On-State Voltage Drop [Vpk]	1.7	1.7	1.7	1.7
Max. Turn-On	10mS	10mS	½ cycle	½ cycle
Max. Turn-Off Time	40mS	40mS	½ cycle	½ cycle
Max I ² t for Fusing (8.3mS)	12700	12700	12700	12700
Max Off-State Leakage Current [mArms]	5	5	5	5
Power Factor (Min.) with Max. Load	0.5	0.5	0.5	0.5
INPUT SPECIFICATIONS				
Control Voltage Range	90-280Vrms		3-32Vdc	
Max. Turn-On Voltage	90Vrms (60Hz)		3.0	
Min. Turn-Off Voltage	10Vrms		1.0	
Nominal Input Impedance [Ohms]	60KOhms		See*	
Typical Input Current	2mA @ 120Vrms		2.0mAdc	
	4mA @ 240Vrms			

*** Input circuitry incorporates active current limiter**

INPUT OPTIONS (DC Controls only)

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(24VAC or DC Power Supply Required)
- TPLP Loop powered time proportioning controller (Burst Fire)
Input: 4-20mA
- LPC Linear phase angle controller
Input: 0-10VDC, 0-5VDC, 2-10VDC, 1-5VDC, 4-20mA,
Potentiometer, 0-135Ω
(24VAC Power Supply Required)

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