

# Power Controller to 25A S Series



### FEATURES:

- Solid State Relay Assemblies rated to 25A/pole @ 40° C (100% duty cycle)
- Available in 1, 2 & 3 Pole configurations
- Relays approved to the following: UL, CSA, VDE and CE
- Zero cross switching standard
- Compact heat sink design for space limited applications
- Finger safe cover standard

OUTPUT SPECIFICATIONS	AC Control					
	HBC-25AS	HBC-25HAS	HBC-625HAS	HBC-50AS	HBC-50HAS	HBC-650HAS
Operating Voltage (47-63 Hz) [Vrms]	24-280	48-530	48-660	24-280	48-530	48-660
Load Current Range [Arms]	.04-15	.04-15	.04-15	.04-25	.04-25	.04-25
Transient Overvoltage [Vpk]	600	1200	1200	600	1200	1200
Max. Surge Current, (16.6ms) [Apk]	250	250	250	625	625	625
Max. On-State Voltage Drop [Vpk]	1.6	1.7	1.7	1.6	1.7	1.7
Max. Turn-on Time (mS)	10	10	10	10	10	10
Max. Turn-off Time (mS)	40	40	40	40	40	40
Max. I <sup>2</sup> t for fusing (8.3mS)	260	260	260	1620	1620	1620
Max. Off-State Leakage Current [mArms]	10	10	5	10	10	5
Power Factor (Min.) with Max. Load	0.5	0.5	0.5	0.5	0.5	0.5
INPUT SPECIFICATIONS						
Control Voltage Range [Vrms]	90-280	90-280	90-280	90-280	90-280	90-280
Max. Turn-on Voltage [Vrms]	90	90	90	90	90	90
Min. Turn-off Voltage [Vrms]	10	10	10	10	10	10
Nominal Input Impedance [Ohms]	60K	60K	60K	60K	60K	60K
Typical Input Current	2mA @ 120Vrms, 4mA @ 240Vrms					

### OPTIONS:

- 2 3 Phase / 2 Pole configuration
- 3 3 Phase / 3 Pole configuration
- 10 Random turn-on
- WH Wiring harness for multi-pole configurations
- E 24VAC Control
- M MOV - External transient voltage suppression
- P Internal transient voltage suppression
- F Fast-on terminals
- 4 400 MHZ operation (available on some assemblies)
- TP Through panel-mount
- PM Panel Mount
- ND No DIN Clip
- CT Current Transducer



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- Compact heat sink design for space limited applications
- Finger safe cover standard
- Phase angle & time proportioning control optional

OUTPUT SPECIFICATIONS	DC Control					
	HBC-25DS	HBC-25HDS	HBC-625HDS	HBC-50DS	HBC-50HDS	HBC-650HDS
Operating Voltage (47-63 Hz) [Vrms]	24-280	48-530	48-660	24-280	48-530	48-660
Load Current Range [Arms]	.04-15	.04-15	.04-15	.04-25	.04-25	.04-25
Transient Overvoltage [Vpk]	600	1200	1200	600	625	1200
Max. Surge Current, (16.6ms) [Apk]	250	250	250	625	625	625
Max. On-State Voltage Drop [Vpk]	1.6	1.7	1.7	1.6	1.7	1.7
Max. Turn-on and Turn-off Time	1/2 cycle	1/2 cycle	1/2 cycle	1/2 cycle	1/2 cycle	1/2 cycle
Max. I <sup>2</sup> t for fusing (8.3mS)	260	260	260	1620	1620	1620
Max. Off-State Leakage Current [mArms]	10	10	5	10	10	5
Power Factor (Min.) with Max. Load	0.5	0.5	0.5	0.5	0.5	0.5
INPUT SPECIFICATIONS						
Control Voltage Range [Vdc]	3-32	3-32	3-32	3-32	3-32	3-32
Max. Turn-on Voltage [Vdc]	3.0	3.0	3.0	3.0	3.0	3.0
Min. Turn-off Voltage [Vdc]	1.0	1.0	1.0	1.0	1.0	1.0
Nominal Input Impedance [Ohms]	1500	See *	See *	1500	See *	See *
Typical Input Current				3.4mA @ 5Vdc, 20mA @ 28Vdc		
		2.0mA *	2.0mA *		2.0mA *	2.0mA *

\* Input circuitry incorporates active current limiter

## INPUT OPTIONS

Change HBC Prefix To:

(Ex: HBC-25HDS = LPC-25HDS)

TP Time proportioning controller (Burst Fire)

Input: 0-10VDC, 0-5VDC, 2-10VDC, 1-5VDC, 4-20mA, 0-20mA, Potentiometer, 0-135Ω (TP135 prefix)  
(24VAC Power Supply Required)

TPLP Loop powered time proportioning controller (Burst Fire)

Input: 4-20mA

LPC Linear phase angle controller

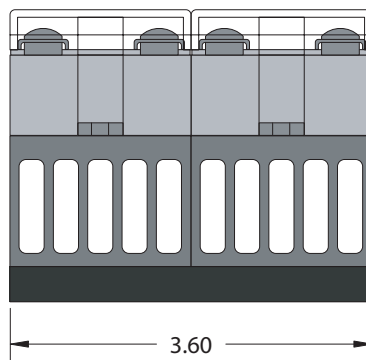
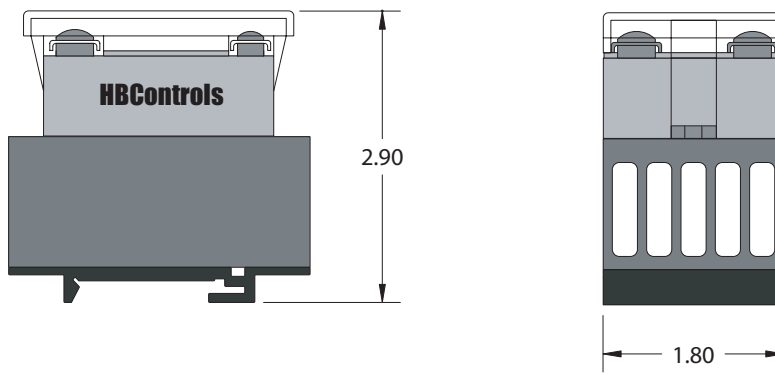
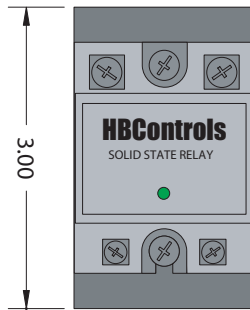
Input: 0-10VDC, 0-5VDC, 2-10VDC, 1-5VDC, 4-20mA, 0-20mA, Potentiometer, 0-135Ω (TP135 prefix)  
(24VAC Power Supply Required)

Also Available: Relay Monitoring Boards (See MB Spec Sheets)

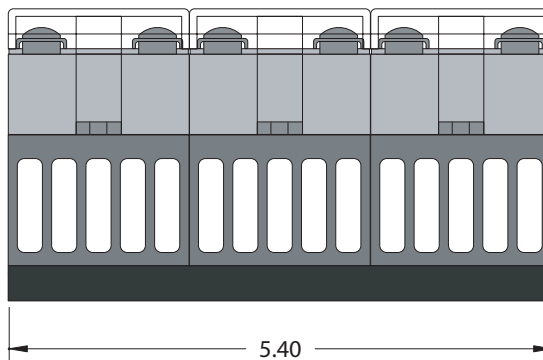
## OPTIONS:

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- 10 Random turn-on
- WH Wiring harness for multi-pole configurations
- Z LED input status indicator
- M MOV - Transient voltage suppression
- P Internal transient voltage suppression
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- TP Through panel-mount
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# Power Controller to 25A S Series



**3 Phase/  
2 Pole  
(-2 Option)**



**3 Phase/  
3 Pole  
(-3 Option)**