

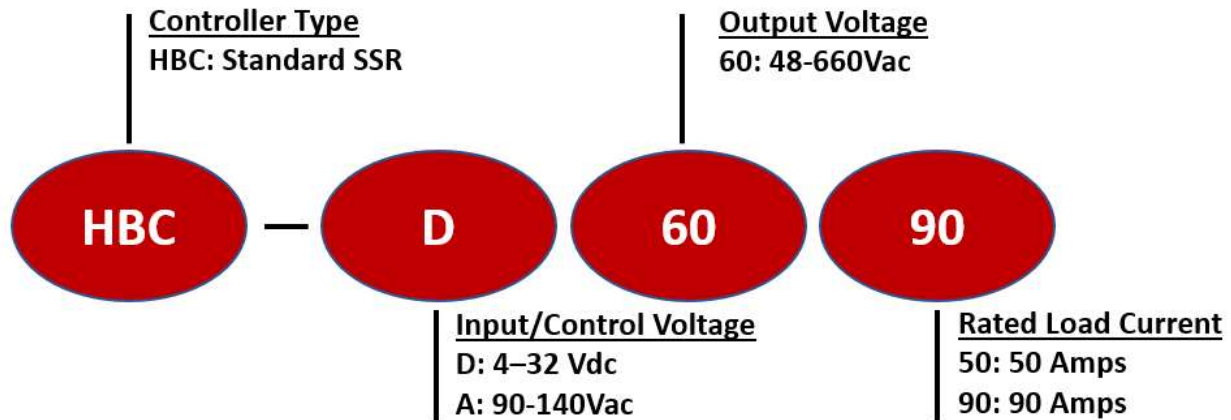
HBC-x60 Stripwire Series

90 Amp Solid State Relay



- SCR output panel-mount solid-state relay
- Output ratings up-to 90 amps @ 40°C ambient temperature
- Box-clamp terminals to accommodate bare-wire terminations
- LED input-status indicator
- Direct-bond copper (DBC) substrate for superior thermal performance
- Direct-power lead-frame design reduces solder joints and enhances reliability
- MTBF > 7 million hours (>800 years)
- Touch-safe housing
- EMC compliant, level 3
- Agency approvals; cURus recognized, CE

Series Nomenclature



Output Specifications

Part Number:	HBC-x6050	HBC-x6090
Operating Voltage (Vrms; 47-440Hz)	48-660	48-660
Load Current Range (Amps RMS)	.15 - 50	.15 - 90
Transient Overvoltage (Vpk)	1200	1200
Max. 1-Cycle Surge Current (Apk; 50/60Hz)	597 / 625	1145 / 1200
Max. On-State Voltage Drop (Vrms)	1.15	1.15
Max I ² T for Fusing (A ² S; 50/60Hz)	1779 / 1621	6560 / 5976
Max. Off-State Leakage Current (mArms)	1	1
Min. Power Factor with Max. Load	0.5	0.5



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Input Specifications

Part Number:	HBC-Dxxx	HBC-Axxx
Control Voltage Range	4-32Vdc	90-140Vac
Minimum Turn-On Voltage	4Vdc	90Vac
Must Turn-Off Voltage	1Vdc	10Vrms
Input Current Range (mA)	17 - 30	10 - 20
Maximum Turn-On / Turn-Off Time (msec)	½ AC Cycle	10 / 40

General Specifications

Description	Specification
Dielectric Strength (Input/Output/Heat Sink)	4,000 Vrms
Ambient Operating Temperature Range	-40 +80 °C
Weight	.2 lbs (91 g)
Solid State Relay Housing Material	UL94 V-0 Polymers
Input Terminal Screw Torque Range (in-lb/Nm)	5-6 / 0.6 - 0.7
Load Terminal Screw Torque Range (in-lb/Nm)	10-15 / 1.1 – 1.7
Maximum Wire Size	Output: AWG 8 (4.8mm) / Input: AWG 12 (2.5mm)
MTBF (Mean Time Between Failures) @ 40°C ambient	~11 Million Hours (>1,300 years)
MTBF (Mean Time Between Failures) @ 60°C ambient	~7 Million Hours (>800 years)

Used with the following Power Controllers:

HBC-D6050
HBC-650CHDA

HBC-D6090
HBC-690CHDA
HBC-690CHDL
HBC-690CHDN
HBC-690CHDXK

HBC-A6050
HBC-650CHAA

HBC-A6090
HBC-690CHAA
HBC-690CHAL
HBC-690CHAN
HBC-690CHAXK

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