

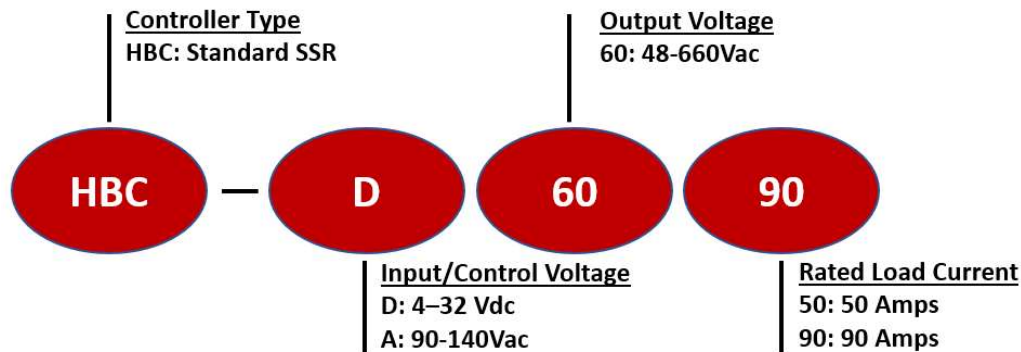
HBC-x60 Stripwire Series

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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