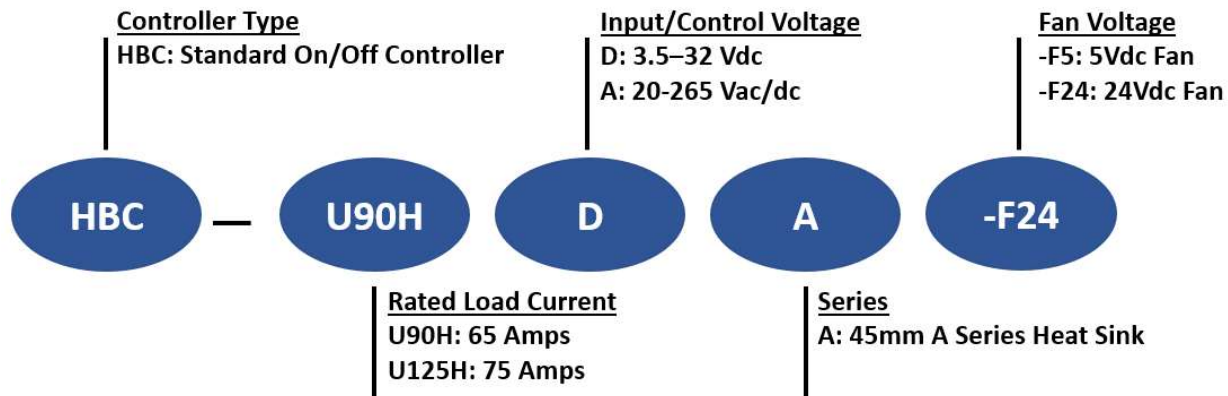


UAF Series Single-Phase 65-75 Amp Solid-State Power Controllers



- SCR output DIN mount single-phase solid-state relay / heat sink assemblies
- Output ratings up-to 75 amps @ 24-510Vac or 24-600Vac in a 40°C ambient temperature
- 3.5-32Vdc or 20-265Vac/dc control
- Integrated output over voltage protection
- IP20 touch-safe housing with removable flaps over the input and output terminals
- Green LED input status indicator
- Thermally efficient heat sink with forced air cooling to maximize overall product life expectancy
- Available with either a 5Vdc or 24Vdc fan
- EMC compliant, level 3
- Solid-state relay approvals: cURus, VDE/TÜV, and CE



Input / Output Specifications	DC Input		AC/DC Input	
	U90HDA-Fx	U125HDA-Fx	U90HAA-Fx	U125HAA-Fx
Part Number: HBC -				
Operating Voltage (Vrms; 47-440Hz)	24-510	24-510	24-600	24-600
Load Current Range (Amps RMS)	0.15 – 65	0.15 - 75	0.15 - 65	0.15 - 75
Output Switching Type	Zero-Cross	Zero-Cross	Zero-Cross	Zero-Cross
Celduc Solid-State Relay Utilized	SO968470	SO869070	SO967940	SO969940
Output Over Voltage Protection	Varistor	Varistor	TVS	TVS
Transient Overvoltage (Vpk)	950	950	1100	1100
Max. On-State Voltage Drop (Vrms @ Imax)	1.1	1.1	1.2	1.2
Max. Surge Current (Apk; 50/60Hz)	1800/1890	2100/2205	1200/1256	2100/2205
Max I ² T for Fusing (A ² S; 50/60Hz)	16200/14880	22000/20177	7200/6573	22000/20177
Max. Off-State Leakage Current (mArms)	1.0	1.0	1.0	1.0
Input / Control Voltage Range	3.5-32Vdc	3.5-32Vdc	20-265Vac/dc	20-265Vac/dc
Input Current Range (mA)	10-13	10-13	5-10	5-10
Max. Turn-On/Turn-Off Time (msec)	½ AC Cycle	½ AC Cycle	30 / 30	30 / 30
Input Over Voltage Protection	TVS	TVS	None	None

UAF Series Single-Phase 65-75 Amp Solid-State Power Controllers

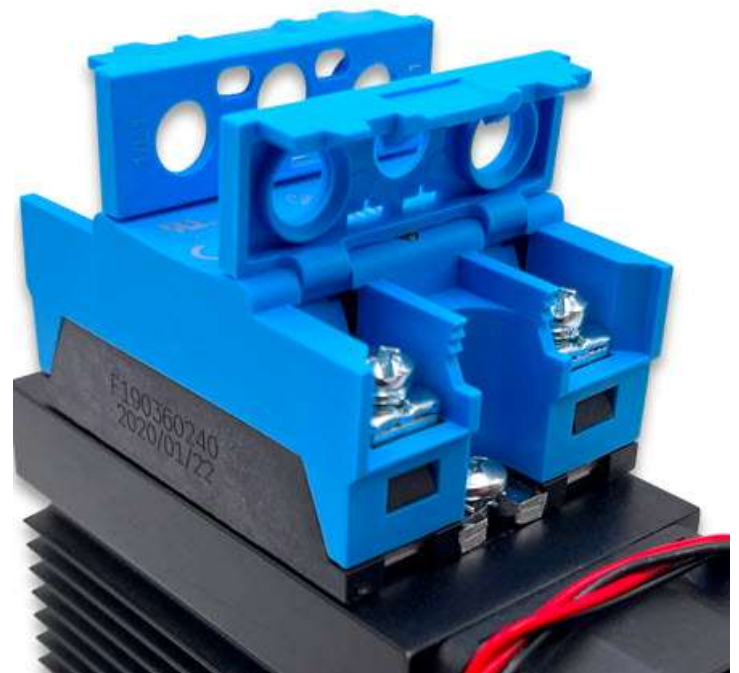
Fan Specifications

Description	5Vdc Fan	24Vdc Fan
Rated Voltage (Vdc)	4.5 – 5.5	24
Maximum Input Current (amps)	0.47	.14
Air Volume (CFM)	11.9	15.2
Speed (RPM)	9,500	10,300
Approximate Noise (dba)	34.2	44.0

General Specifications

Description	Specification
Dielectric Strength (Input/Output/Heat Sink)	4,000 Vrms
Ambient Operating Temperature Range	-40 to +80 °C
Weight	0.92 lbs (420 g)
Solid State Relay Housing Material	UL94 V-0 Polymers
Heat Sink Material	Aluminum
Input Terminal Screw (M4) Torque Range (in-lb/Nm)	13 - 17 / 1.5 - 2.0
Load Terminal Screw (M5) Torque Range (in-lb/Nm)	21 - 26 / 2.4 - 3.0
Ingress Protection*	IP20 (IP00 with terminal covers raised)

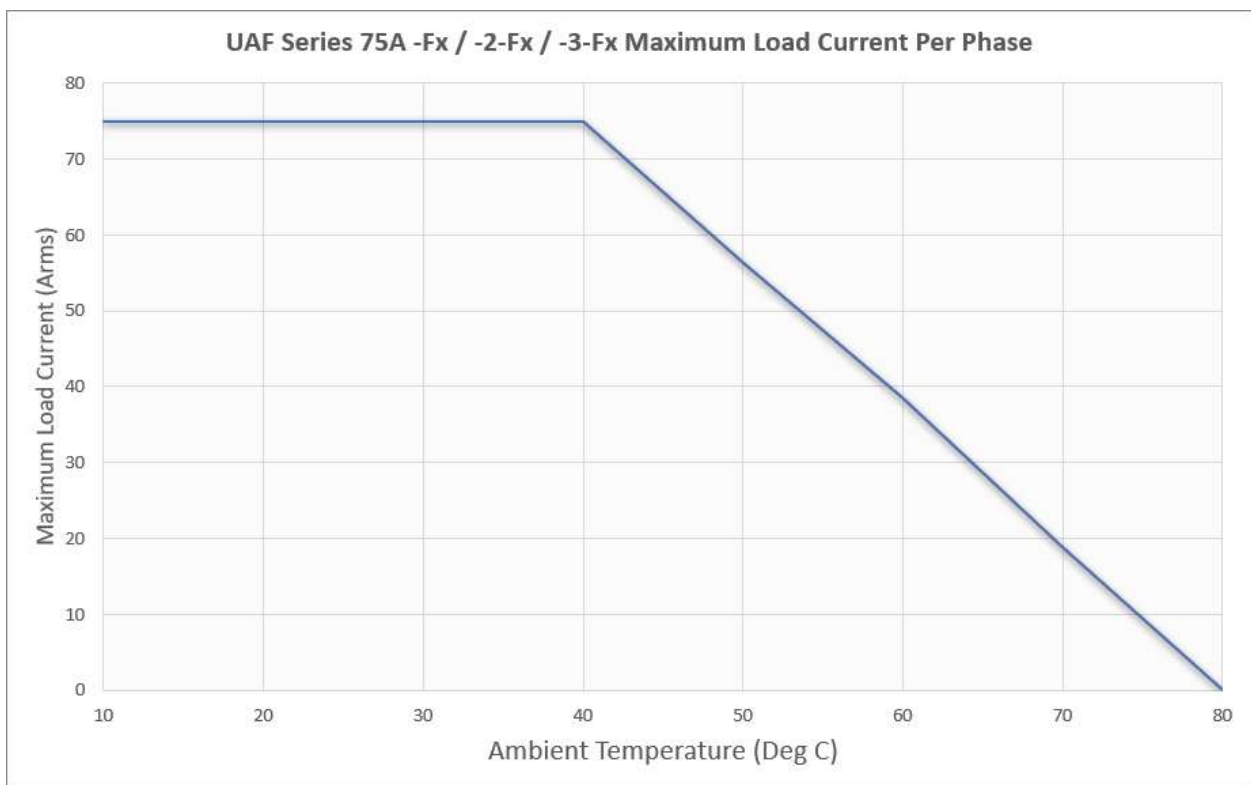
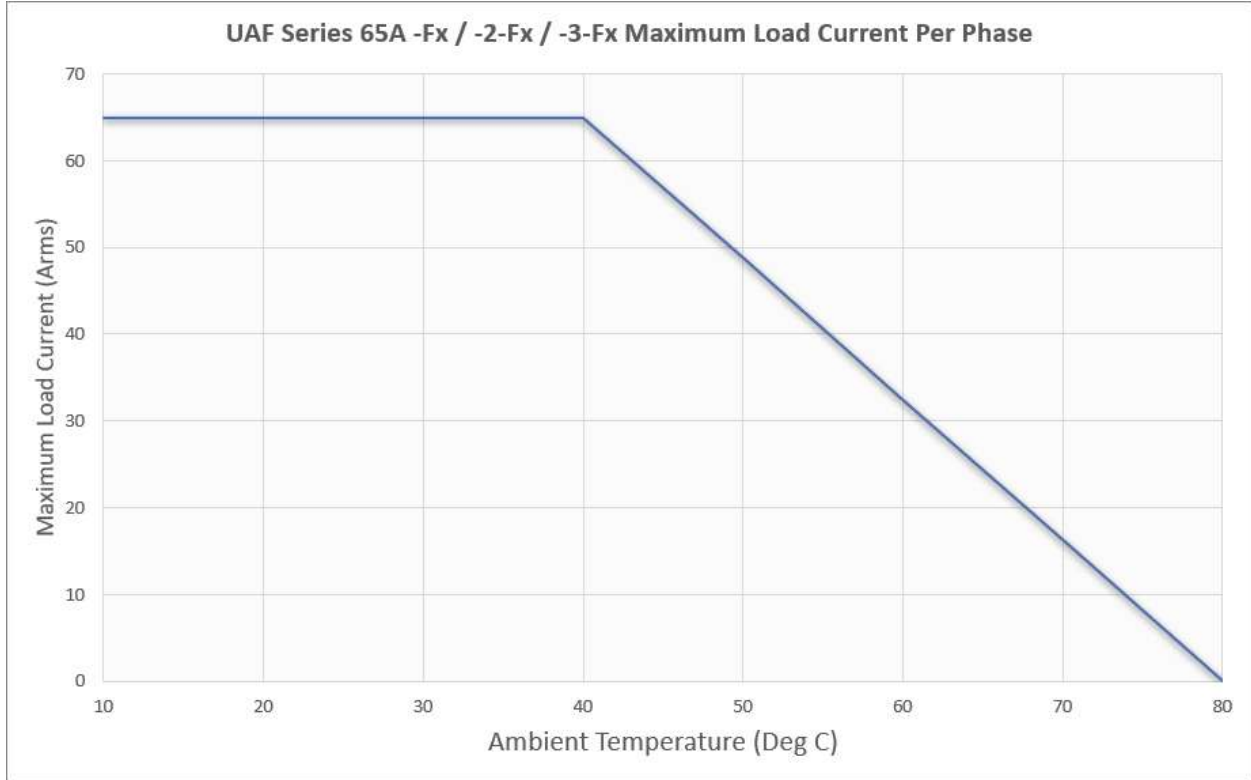
***Input & output terminal covers can be lifted or removed to simplify the installation process.**



UAF Series Single-Phase 65-75 Amp Solid-State Power Controllers



Derating Curves:



UAF Series Single-Phase 65-75 Amp Solid-State Power Controllers

Termination Specifications:

Input / Output Connections:

Input Connections (1 or 2 wires):

Solid Wire – No Ferrule



14 AWG – 18 AWG
0.75 mm² – 2.5 mm²

Stranded – W/Ferrule*



14 AWG – 18 AWG
0.75 mm² – 2.5 mm²



Output Connections (1 or 2 wires):

Solid Wire – No Ferrule



8 AWG – 16 AWG
1.5 mm² – 10.0 mm²

Stranded – W/Ferrule*



8 AWG – 16 AWG
1.5 mm² – 10.0 mm²



* Termination with stranded wires without ferrules is not recommended

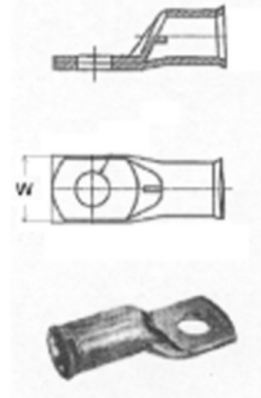
Load Terminal Connection with Ring Terminals:

Max. Width = 0.5" / 12.6mm

Suggested narrow tongue compression terminal lugs for applications with large power conductors:*

- 6 AWG / 16 mm² = Burndy YA6CLBOX
- 4 AWG / 25 mm² = Burndy YA4CLBOX
- 2 AWG / 35 mm² = Burndy YA2CLNT14
- 1 AWG / 50 mm² = Burndy YA1CLNT14

* Correct terminal selection may depend upon multiple application factors. It is the responsibility of the end user to determine whether these or similar terminals are suitable for use in their applications. Please review terminal specifications carefully to ensure suitability for use within the application.



UAF Series Single-Phase 65-75 Amp Solid-State Power Controllers

Dimensions:

