

VersaBridge[®] AC 3R

Medium Voltage Variable Frequency Drive



SPECIFICATIONS

Electrical

Nominal Motor Capacity	1500 – 2000 HP
Output Current	260 A
Output Voltage	0 – 4.16 kV
Output Frequency	0 – 120 Hz Standard, Higher Available with Derating
Overload	VT: 110% for 1 min Every 10 min CT: 150%*
Regulatory Compliance	UL, cUL, IEEE, ANSI, NEMA
Auxiliary Supply	460 V, 60 Hz, 3-Ph
Mains Supply Voltage	4.16 kV \pm 10%
Mains Supply Frequency	60 Hz \pm 5%
Input Protection	Integral, Fused Vacuum Starter with Isolation Switch
Input Power Factor	\geq 0.95 at Rated Power
Efficiency	\geq 0.96
Input Harmonics	IEEE 519, IEC 61000-2-4 Compliant
Output Harmonics	< 1% THD (Current)
Transformer Topology	54 Pulse, Integral
Inverter Topology	Multilevel, Cascaded H-Bridge
DC Capacitor Type	Film, Self-healing, 20-Year Life
Ride-Through Capability	IEEE 1566 Compliant

* Consult factory for additional options.

Controls

Control Method	V/Hz, Vector*
User Interface/ Display	10" PC, Capacitive Touch Screen
Communication Interface	Modbus TCP/IP (Ethernet), RS-232 , and RS-485, PLC I/O
User I/O	(8) Digital Inputs – (8) Digital Outputs (2) Analog Inputs – (2) Analog Outputs
Indicators	Fault (Red) – Alarm (Amber) Run Status (Green) – Main/Aux Power Status (White)
Isolation Type	Optical Fiber
Speed Regulation	± 1%
Spinning Load	Auto/Manual Restart, Catch a Spinning Load
Synchronous Transfer	Automatically Transfer the Motor to and from the Utility Line, Closed-Transition Operation
Protective Functions	Overcurrent, Overload, Current Limit, Over/Under Voltage, Ground Fault, Unbalance, Over Temperature, Overspeed

Mechanical

Enclosure Rating	NEMA 3R, Gasketed
Enclosure Access	Padlockable Access Doors
Cable Entry	Bottom
Rear Access	Not Required
Cabinet Dimensions	L: 253" x W: 118" x H: 135"
Color	Light Gray, RAL 7035
Total Weight	26,600 lbs

Environmental Condition

Ambient Temperature	- 20°C to 50°C
Altitude	0 – 1000m, Up to 2000m with Derating
Humidity	95%, Non-Condensing
Noise Level	≤ 85 dBA

Cooling System

Transformer	Forced-Air Cooling, Redundant Fans
Electronics	Forced-Air Cooling, Redundant Fans

* Consult factory for additional options.

Commissioning support is available. Contact our Aftermarket Service group at 512-218-7603 for further details.