

# UNSTOPPABLE NOTOR TECHNOLOGY

# JUGGERNAUT® CONDENSER FAN MOTORS



Continuous duty, JuggerNaut® motors must be mounted within the airflow of the fan.



An external shaft slinger effectively redirects fluids and dirt in vertical shaft-up installations.

JuggerNaut motors are designed for easy, drop-in replacement.

### HIGH OPERATING TEMPS. VARIABLE FREQUENCY DRIVE OPERATION. YOU NEED A REAL JUGGERNAUT.

Today's HVAC and heat pump technology isn't what it used to be — it's so much more. The demand for energy efficiency and VFD control requires motor technology that can handle the load day in and day out. The sun is relentless on rooftop HVAC installations. And when the thermostat calls, everything has to work. Century<sup>®</sup> brand JuggerNaut<sup>®</sup> motors are tailor made for these demanding commercial and residential condenser fan and heat pump applications.

## OPTIMAL SOLUTIONS BUILT TO HANDLE THE LOAD.

Variable frequency drives enable very precise motor control, but that puts high demand on the motor itself. Rather than a smooth sine wave, power to the motor is a series of pulses that can abrade the motor bearing surfaces — the most vulnerable component. Repairing failed bearings quickly erodes energy savings gained by the VFD. And costly unplanned downtime isn't tolerated any longer.

# JUGGERNAUT® AND JUGGERNAUT PRO MOTORS AT A GLANCE:

- 70°C (158°F) max ambient condition ensures longer motor life
- VCD<sup>™</sup> Voltage Change Device enables quick 230V or 460V voltage selection
- Double sealed ball bearings are prelubricated with a special formulation for moisture resistance and provide extra long life
- Shaft-up-design with slinger
- Three-phase, TEAO, ODP, OAO, footed and footless, AC designs available
- Quick-connect design for efficient OEM and retrofit installation
- Automatic reset thermal protector protects against motor overload and automatically resets

### WHAT'S ON THE INSIDE MATTERS MOST

#### JuggerNaut Motor

- Non-conductive grease bearing to reduce voltage spikes caused by variable frequency drives
- Full phase insulation and inverter duty wire optimized for use with variable frequency drives

#### JuggerNaut Pro Motor

 Patented Max Guard<sup>®</sup> insulation system ensures dependable motor life under the adverse thermal and dielectric stresses imposed by the high switching frequencies of PWM medium voltage drives



Changing voltage from 230V to 460V is easy with VCD switch. Remove two screws to open the access plate and reposition the jumper switch.



# INVERTER TECHNOLOGY NEEDS BEARING CURRENT PROTECTION

Bearings are mechanical devices, subject to wear and damage. However, the impact on them is often unknown and hence overlooked when used with variable frequency drives.

When you need a motor that can handle the demands inverters create, look no further than the JuggerNaut<sup>®</sup> Pro condenser fan motor with bearing current protection. BCP<sup>™</sup> technology is an internal grounding brush mounted internally on the drive end for servicing when needed. You get unsurpassed protection in the most demanding applications.





Century<sup>®</sup> JuggerNaut Pro model featuring internal grounding brush.

### THERE'S A JUGGERNAUT® CONDENSER

Century <sup>®</sup> JuggerNaut <sup>®</sup> Pro Motor Three Phase – Removable Base or Belly Band							Nidec®* VariTough®* Motor		Baldor®* Motor		Dayton®* Motor	
Model	Enclosure	HP	RPM	Voltages	Frame	Model	Encl.	Model	Encl.	Model	Encl.	
H1055A-PRO	OAO	1/2	1140	460/200-230	56HZ	_	—	_	_	_	_	
H1056A-PRO	OAO	3/4	1140	460/200-230	56HZ	_	_	_	_	_	_	
H1053A-PRO	OAO	1	850	460/208-230	56HZ	_	—	_	—	_	_	
H1050A-PRO	OAO	1	1140	460/208-230	56HZ	1818VG	OAO	_	_	20RK80 <sup>◊</sup>	OAO	
H1054A-PRO	OAO	1.5	850	460/208-230	56HZ	1832VG	OAO	_	_	20RK81 <sup>◊Δ</sup>	OAO	
H1051A-PRO	OAO	1.5	1140	460/208-230	56HZ	1819VG	OAO	_	_	20RK82 <sup>◊</sup>	OAO	
H1052A-PRO	OAO	2	1140	460/208-230	56HZ	8987VG	OAO	—	—	20RK83 <sup>◊</sup>	OAO	
Century JuggerNaut Pro Motor Three Phase – Rigid Base							Nidec®* VariTough®* Motor		Baldor®* Motor		Dayton®* Motor	
H1050RB-PRO	OAO	1	1140	460/208-230	56HZ	1820VG	OAO	_	—	20RK85	OAO	
H1053RB-PRO	OAO	1	850	460/208-230	56HZ	1833VG	OAO	—	_	20RK84	OAO	
H1051RB-PRO	OAO	1.5	1140	460/208-230	56HZ	1821VG	OAO	—	—	20RK87	OAO	
H1054RB-PRO	OAO	1.5	850	460/208-230	56HZ	1831VG	OAO	_	—	$20RK86^{\Delta}$	OAO	
H1052RB-PRO	OAO	2	1140	460/208-230	56HZ	1822VG	OAO	—	—	20RK88	OAO	
					*No	o Base		<sup>◊</sup> Belly Band		<sup>∆</sup> 60° Ambient Temp.		





### FAN MOTOR FOR EVERY APPLICATION

Century <sup>®</sup> J Three Phas				or Belly Band		Nidec <sup>®*</sup> VariTough <sup>®*</sup> Motor		Baldor®* Motor		Dayton®* Motor	
Model	Enclosure	HP	RPM	Voltages	Frame	Model	Encl.	Model	Encl.	Model	Encl.
H1055AV1	OAO	1/2	1140	460/200-230	56HZ	_	_	CFM3136A <sup>◊</sup> / M3539-TP <sup>◊</sup>	ODP	_	_
H1056AV1	OAO	3/4	1140	460/200-230	56HZ	_	_	CFM3146A <sup>◊</sup>	ODP	_	_
H1053AV1	OAO	1	850	460/208-230	56HZ	_	_	_	_	_	_
H1050AV1	OAO	1	1140	460/208-230	56HZ	1818V	OAO	CFM3156A <sup>◊</sup>	ODP	24PR72 <sup>◊</sup>	OAO
H1054AV1	OAO	1.5	850	460/208-230	56HZ	1832V	OAO	_	_	24PR73 <sup>◊Δ</sup>	OAO
H1051AV1	OAO	1.5	1140	460/208-230	56HZ	1819V	OAO	CFM3166A <sup>◊</sup>	ODP	24PR74 <sup>◊</sup>	OAO
H1052AV1	OAO	2	1140	460/208-230	56HZ	8987V	OAO	_	_	24PR75 <sup>◊</sup>	OAO
Century JuggerNaut Motor Three Phase – Rigid Base						Nidec®* VariTough®* Motor		Baldor®* Motor		Dayton®* Motor	
H1050RBV1	OAO	1	1140	460/208-230	56HZ	1820V	OAO	—	—	24PR78	OAO
H1053RBV1	OAO	1	850	460/208-230	56HZ	1833V	OAO	_	—	24PR77	OAO
H1051RBV1	OAO	1.5	1140	460/208-230	56HZ	1821V	OAO	—	_	24PR80	OAO
H1054RBV1	OAO	1.5	850	460/208-230	56HZ	1831V	OAO	-	_	$24$ PR79 <sup><math>\Delta</math></sup>	OAO
H1052RBV1	OAO	2	1140	460/208-230	56HZ	1822V	OAO	-	_	24PR81	OAO
					*No	Base		<sup>◊</sup> Belly Band		<sup>6</sup> 60° Ambient Temp.	





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#### APPLICATION CONSIDERATIONS

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