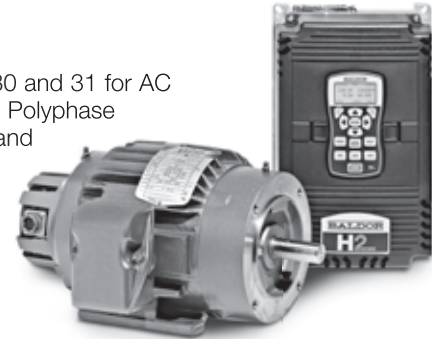


AC Motor Adjustable Speed Range Capabilities

Inverter Drive® and Vector Drive® Motors

Inverter Drive® and Vector Drive® Motors exceed all requirements of NEMA MG-1 Parts 30 and 31 for AC induction motors powered from adjustable speed controls. Definite-Purpose Inverter-Fed Polyphase Motors, as defined for Inverter Drive Motors are suitable for variable torque applications and rated 1000:1 for constant torque (except for those Inverter Duty motors rated for use in hazardous locations). Vector Drive motors are capable of full, rated torque at 0 RPM, continuous duty. Satisfactory motor performance depends on proper drive setup.



It is necessary that motor-drive applications are commissioned by persons familiar with the operation and setup of adjustable speed drives, applicable electrical codes and any other regulations. Each drive must be tuned to the motor for the specific application. System operating parameters must be checked, including voltage at motor power leads, to insure that motor/drive set up has been successfully completed. Applications that are not properly set up can lead to substandard performance and failure of system components.

Super-E® Motors

All Super-E motors are Inverter-Ready and meet NEMA MG 1 Part 31.4.4.2. Super-E motors are suitable for use with inverter drives in applications with variable torque and with a constant torque 20:1 speed range except as noted below. Motor inverter setup is unique to each specific application. Setup and correct wiring procedures must be closely followed.

Standard-E® Motors

Standard-E EPA efficient motors are suitable for use in adjustable speed applications per NEMA MG 1 Part 30. With proper motor-inverter setup, Standard-E motors are suitable for use at 20:1 variable torque and 4:1 constant torque applications.

Note: Use of explosion proof motors with inverters should be limited to Inverter-Duty Explosion proof motors only. Contact your local Baldor District Office for application questions regarding your specific application.

Family	Frame Size	Constant Torque	Variable Torque	Comments
Super-E Motors 230, 460 and 575 Volts				
EM (TEFC)	56 - 365 (1) 404 - 449 (1)	20:1 10:1	20:1	General Purpose Premium Efficiency
EM (ODP)	143 - 445	20:1	20:1	General Purpose Premium Efficiency
ECP	143 - 365 404 - 449	20:1 10:1	20:1 20:1	Severe Duty Premium Efficiency
ECP8 (IEEE841)	143 - 365 404 - 449	20:1 10:1	20:1 20:1	Severe Duty Premium Efficiency May not meet temp rise as specified in IEEE841 when used with ASD.
EWDM	56 - 215 (1)	20:1	20:1	Washdown Duty Premium Efficiency
Standard-E Motors 230, 460 and 575 Volts				
M (TEFC)	56 - 5009 (1)	4:1	20:1	General Purpose
M (ODP)	56 - 5009 (1)	4:1	20:1	General Purpose
CP	143 - 405	4:1	20:1	Severe Duty
WDM	56 - 215 (1)	4:1	20:1	Washdown Duty
Inverter Duty and Vector Duty Motors 230, 460 and 575 Volts				
V*S Master				
IDNVSM (TENV)	56 - 256	1000:1	1000:1	Inverter Duty TENV V*S Master
IDVSM (TEFC)	182 - 449	1000:1	1000:1	Inverter Duty TEFC V*S Master
ZDNVSM (TENV)	56 - 256	1000:1	1000:1	Vector Duty TENV V*S Master
ZDVSM (TEFC)	182 - 449	1000:1	1000:1	Vector Duty TEFC V*S Master
ZDVSCP	143 - 326	1000:1	1000:1	Vector Duty TEFC - XT V*S Master
RPMAC				
IDRPMN (TENV)	FL1838 - FL2162	1000:1	1000:1	Inverter Duty TENV RPMAC
IDRPM (TEFC, TEBC, DPGFV)	FL1844 - L4461	1000:1	1000:1	Inverter Duty TENV, TEBC, DPG-FV RPMAC
ZDRPMN (TENV)	FL1838 - FL2162	1000:1	1000:1	Vector Duty TENV RPMAC
ZDRPM (TEFC, TEBC)	FL1844 - L4022	1000:1	1000:1	Vector Duty TEFC, TEBC RPMAC
ZDRPM (TEBC)	FL1831 - FL2586	1000:1	1000:1	Vector Duty TEBC Permanent Magnet PM RPMAC
IDM (TEBC)	143 - 5009	1000:1	1000:1	Inverter Duty/Blower cooled
IDNM (TENV)	143 - 256	1000:1	1000:1	Inverter Duty/Non-Vented
ZDM (TEBC)	143 - 5009	1000:1	1000:1	Vector Duty/Blower Cooled
ZDNM (TENV)	143 - 256	1000:1	1000:1	Vector Duty/Non Vented
IDXM (2 families)	182 - 405 56 - 405	2:1 10:1	10:1 10:1	Explosion Proof Inverter Duty
IDWNM	143 - 254	20:1	1000:1	Washdown Duty Inverter Duty/Non Vented
ZDWNM	143 - 254	1000:1	1000:1	Washdown Duty Vector Duty/Non Vented

(1) Baldor type 35M and larger.

Farm Duty Motors

Definite Purpose Motors

Unit Handling Motors

Brake Motors

200 & 575 Volt Motors

IEC Frame Motors

50 Hertz Motors

Inverter/Vector Motors & Controls

DC Motors and Controls

Soft Starters & Dynamic Brakes