WORLDWIDE MOTOR CONTROLS

Variable Frequency Drives

HYUNDAI N700E Series High Performance Drives

Specifications

Specification			Description
Control Method			Sensorless vector PWM method
Output Frequency Range			0.01~400 Hz
Frequency Accuracy			Digital: Max frequency ±0.01%; Analogue: Max frequency ±0.1%
Frequency Resolution			Digital setting: 0.01 Hz (<100 Hz), 0.1Hz (>100 Hz) Analogue: Max frequency / 500 (when DC 5V input), Max frequency / 1,000 (DC 0~10V, 4~20mA)
V/f Characteristic			Base frequency: 0~400 Hz free set Torque pattern selection available (constant torque / reduced torque)
Overload Capacity			150%, 1 minute (heavy duty), 120%, 1 minute (normal duty)
Acceleration/Deceleration Time			0.1~3,000 sec (linear / curve selection available) 2nd Acceleration / Deceleration setting available
DC Braking			Performs between min. frequency and established braking frequency Level and time setting available
Input	Frequency Setting	Standard Operator	Set by volume up / down key 1 W, 1~2 kΩ variable resistor DC 0~10 V (input impedance 10 kΩ), 4~20 mA (input impedance 250Ω)
		External Signal	
	Forward Reverse Start / Stop	Standard Operator	Run key / Stop key (change forward / reverse by function command)
		External Signal	Forward run / stop, reverse run / stop set by terminal assignment (1a, 1b selection available)
	Intelligent Input Terminal		FW (Forward), RV (Reverse), CF1~4 (Multi-speed), RS (Reset), AT (Analog input current / voltage Transfer), USP (Unattended Start Protection), EXT (External Trip), FRS (Free Run Stop), JG (Jogging Command), SFT (Software Lock Command), 2CH (2nd Acceleration / Deceleration), SET (2nd Motor Constants Setting)
Output	Intelligent Output Terminal		RUN (Run Signal), FA1 (Frequency Arrival Signal [at the set frequency]), FA2 (Frequency Arrival Signal [at or above the set frequency]), OL (Overload Advanced Notice Signal), OD (Output Deviation of PID Signal), AL (Alarm Signal)
	Frequency Monitor		Analog meter (DC0~10V full scale, Max 1 mA) Analog output frequency signal and analog output current signal Analog output voltage signal selection available
	Alarm Output Contact		OFF when inverter alarm (b contact output) / Auto switch ON and OFF / Intelligent output terminal use available
Main Functions			Auto-tuning, AVR Function, V/F Setting, Curve Accel. / Decel. Selection, Frequency Upper / Lower Limit, 6 Level Multi-speed, Start Frequency Set, Carrier Frequency Setting (0.5~15 kHz), PID Control, Frequency Jump, Analog Gain Bias Control, Jogging Run, Electronic Thermal Level Control, Retry, Auto Torque Boost, Trip History Monitor, Software Lock, S-shape Accel. / Decel., Frequency Conversion Display, USP, 2nd Control
Protective Functions			Over-current Protection, Overload (electronic thermal), Over-voltage, Communication Error, Under-voltage, Output Short, USP Error, EEPROM Error, External Trip, Ground Fault, Temperature Trip
Environmental Conditions	Ambient Temperature		-10~50°C (over 40°C: set carrier frequency below 2.0 kHz)
	Storage Temperature		-20~60°C (while transporting: short time)
	Ambient Humidity		Below 90% RH (non-condensing)
	Vibration		5.9 m/s² (0.6 G). 10~55 Hz (JIS C0911 test methodology)
	Location		Less than 1,000 m above sea level, Indoor (no corrosive gas, no flammable gas, no oil-drop, no dust)
Options			Remote operator, Remote operator cable, Regenerative braking resistor

NOTES:

- All WorldWide Hyundai N700E drives can be uses for singe-phase input / three-phase output. Call for engineering assistance to size properly.
- Always check the motor full load amps prior to selecting the inverter.