

BALDOR • RELIANCE

Series 15J and 15P Mini Inverters

1/3 thru 1 Hp	95-130 VAC	1 Phase - 60 Hz
1 thru 5 Hp	180-264 VAC	3 Phase - 50/60 Hz
1 thru 7.5 Hp	340-528 VAC	3 Phase - 50/60 Hz



Applications: Variable torque, constant torque or constant horsepower applications. New installations, replacements and original equipment manufacturers (OEM).

Features: NEMA 1 enclosure as standard. Output frequency 0.25 to 150 Hz with peak overload capacity of 200%. Separate accel/decel rates and controlled reversing. Digital operator control and display on the 15J and rotary speed control with direction indicators on the 15P models.

15J Design Specifications

- Dual microprocessor controlled PWM output
- Free run or ramp stop
- Controlled reversing
- Selectable preset speeds
- Dynamic braking option
- Max output frequency of 150 Hz
- DC injection braking
- Analog meter output
- Relay contact output
- Two analog inputs
- Process control (PID)

15J Operator Keypad

- Digital speed control
- Forward/Reverse command
- Stop command
- Membrane keys with tactile feel
- Parameter setting and display
- Display 2 lines by 16 character in English, Spanish, French, German, Italian, and Portuguese
- Optional remote mount NEMA 4X keypad
- Jog command

Environmental and Operating Conditions

- Input voltage
 - 1 Phase 106-118 VAC ±10%.
 - 3 phase 200-240 VAC ±10%,
 - 3 phase 378-480 VAC ±10%.
- Input frequency - 50 or 60 Hz ±10%
- Service factor - 1.0
- Duty - continuous
- Humidity - 90% max non-condensing
- Altitude - 3300 feet max without derate

15J Protective Features

- Selectable automatic restart at momentary power loss
- DC bus and fault indicator
- Adjustable time based overload
- Cause of last 31 trips retained in memory
- Digital display for fault conditions
- Isolated control circuitry

15P Design Specifications

- Dual microprocessor controlled PWM output
- Free run or ramp stop
- Controlled reversing
- Dynamic braking option
- Adjustable torque boost
- Separate accel/decel rates
- Selectable auto restart
- Adjustable current limit
- Max output frequency of 130 Hz

15P Operator Keypad

- Rotary speed control
- Forward/Reverse command
- Stop command
- Membrane keys with tactile feel
- Fault indicator
- Power on indicator

15P Protective Features

- Selectable automatic restart at momentary power loss
- DC bus present indicator
- Fault indicator
- Adjustable time based overload
- Isolated control circuitry

Control Specification	Control Method	Sinewave carrier input, PWM output
	PWM Frequency	Rated at 2.5 kHz (15J - adjustable 2.5 - 7.5 kHz)
	V/Hz Ratio	Linear to squared reduced (15J) or adjustable torque boost (15P)
	Torque Boost	0-15% - adjustable
	Brake Torque	Up to 60%, external resistor required
	Frequency Setting	0-5 VDC, 0-10 VDC, 0-20 mA, 4-20mA, digital via keypad (0-10VDC, 4-20mA only on 15P)
	Accel/Decel	Separate accel/decel rates, 0-600 seconds (0-60 seconds on 15P)
Protective Functions	Inverter Trip	Over voltage, over current, under voltage, external trip, heatsink thermal, motor overload
	External Output	NO and NC relay and LED indicator for trip (LED indicators only for fault trip and power on for 15P)
	Short Circuit	Output phase to ground and phase to phase
Ambient Conditions	Temperature	0-40°C, derate for up to 55°C
	Cooling	Forced air included when required
Dimensions	Outside	7.60 (193) Height 4.83 (123) Width 4.45 (113) Depth (5.2(132) depth for ID15J205-ER and ID15J407-ER)
	Mounting	7.21 (183) Height 4.40 (112) Width



Series 15J and 15P Mini Inverters continued...

Hp	kW	Input Voltage	Output Current			Catalog Number	List Price	Mult. Sym.
			Cont.	60 Sec	2 Sec			
Series 15J Mini Inverter								
0.33	0.25	115 (1)	1.6	2.4	3.2	ID15J1F33-ER	673	E1
0.50	0.37	115 (1)	2.3	3.5	4.6	ID15J1F50-ER	692	E1
0.75	0.56	115 (1)	3.2	4.8	6.4	ID15J1F75-ER	712	E1
1	0.75	115 (1)	4.2	6.3	8.4	ID15J101-ER	749	E1
1	0.75	230	4.2	6.3	8.4	ID15J201-ER	724	E1
1.5	1.1	230	6.0	9.0	12.0	ID15J201F5-ER	788	E1
2	1.5	230	6.8	10.2	13.6	ID15J202-ER	843	E1
3	2.2	230	9.6	14.4	19.2	ID15J203-ER	1042	E1
5	3.7	230	15.2	22.8	30.4	ID15J205-ER	1171	E1
1	0.75	460	2.1	3.2	4.2	ID15J401-ER	1010	E1
1.5	1.1	460	3.0	4.5	6.0	ID15J401F5-ER	1086	E1
2	1.5	460	3.4	5.1	6.8	ID15J402-ER	1245	E1
3	2.2	460	4.8	7.2	9.6	ID15J403-ER	1352	E1
5	3.7	460	7.6	11.4	15.2	ID15J405-ER	1522	E1
7.5	5.6	460	11.0	16.5	22.0	ID15J407-ER	1963	E1
Series 15P Mini Inverter								
0.33	0.25	115 (1)	1.6	2.4	3.2	ID15P1F33-ER	666	E1
0.50	0.37	115 (1)	2.3	3.5	4.6	ID15P1F50-ER	685	E1
0.75	0.56	115 (1)	3.2	4.8	6.4	ID15P1F75-ER	704	E1
1	0.75	115 (1)	4.2	6.3	8.4	ID15P101-ER	748	E1
1	0.75	230	4.2	6.3	8.4	ID15P201-ER	722	E1
1.5	1.1	230	6.0	9.0	12.0	ID15P201F5-ER	784	E1
2	1.5	230	6.8	10.2	13.6	ID15P202-ER	839	E1
3	2.2	230	9.6	14.4	19.2	ID15P203-ER	986	E1
5	3.7	230	15.2	22.8	30.4	ID15P205-ER	1122	E1
1	0.75	460	2.1	3.2	4.2	ID15P401-ER	950	E1
1.5	1.1	460	3.0	4.5	6.0	ID15P401F5-ER	1036	E1
2	1.5	460	3.4	5.1	6.8	ID15P402-ER	1196	E1
3	2.2	460	4.8	7.2	9.6	ID15P403-ER	1307	E1
5	3.7	460	7.6	11.4	15.2	ID15P405-ER	1479	E1
7.5	5.6	460	11.0	16.5	22.0	ID15P407-ER	1899	E1

(1) 115 volt, 1 phase input; 230 volt, 3 phase output.



Keypad with Cable

- 32 Character alphanumeric display
- NEMA 4X enclosure when mounted on panel
- Backlit LCD
- Remote mount to 100 ft. from control

Catalog Number	Cable Length	List Price	Mult. Sym.
CBLSM015KP	5 ft.	217	E8
CBLSM030KP	10 ft.	249	E8
CBLSM046KP	15 ft.	279	E8
CBLSM061KP	20 ft.	309	E8
CBLSM091KP	30 ft.	370	E8
CBLSM152KP	50 ft.	491	E8
CBLSM229KP	75 ft.	613	E8
CBLSM305KP	100 ft.	796	E8

Dynamic Braking Assemblies

- Aluminum frame resistors
- Panel mounting tabs



Hp	Input Voltage	Min. Ohms	Continuous Rated Watts			Mult. Sym.
			100	200	300	
0.33-5	115 or 230	60	RGJ160	RGJ260	RGJ360	E8
1-1.5	460	150	RGJ1150	RGJ2150	RGJ3150	
2-7.5	460	120	RGJ1120	RGJ2120	RGJ3120	
List Price			76	99	154	

Farm Duty Motors

Definite Purpose Motors

Unit Handling

Brake Motors

200 & 575 Volt Motors

IEC Frame Motors

50 Hertz Motors

Inverter/Vector Motors & Controls

DC Motors and Controls

Soft Starters & Dynamic Brakes