Description

5-500HP
P7/Bypass

Model Number Configuration & Pricing:

Step 1. First complete the Base Number for the required enclosure type, voltage and current rating.

Step 2. Add the Option code letter for each required option. If an option is not wanted, no character is inserted.

Step 3. Find the list price for the Base Number selected from the following pages. Add the list price of each selected option to this base price.

Example: P7 Bypass package **(P7BV)** with a 40 Amp, 480V drive **(B040)**, 3% Bus reactor (**X**), door-mounted speed pot (**S**) and Profibus communication capability (**H**). Model number is:

P7BVB040XSH

BASE NUMBER	OPTIONS
P 7 B ___	___ ___ ___ ___ ___ ___ ___ ___ ___ ___

Enclosure	
V	NEMA 1
B	NEMA 12 FVFF

Voltage	
D	208V
A	230/240V
B	480V

Current	
Rated Amps Code (Ex.: “040” = 40A)	

Motor Control	
	1 Motor (leave blank)
D	2 Motor “OR”
A	2 Motor “AND”

Input Filter	
	None (leave blank)
N	Cap Filter
E	RFI Filter

Input Fuses	
	None (leave blank)
F	Fuses

Communications	
	None (leave blank)
G	DeviceNet
H	Profibus
V	Modbus (Internal)
L	LonWorks
Q	Modbus TCP/IP
2	EtherNet/IP
J	METASYS N2
U	Siemens APOGEE FLN

4-20mA Output	
	None (leave blank)
M	4-20mA Output

3-15 PSI Transducer	
	None (leave blank)
P	3-15 PSI Trans

Speed Pot	
	None (leave blank)
S	Speed Pot

Nameplates	
	None (leave blank)
W	Custom Nameplates

Load Reactor	
	None (leave blank)
K	5% Load Reactor (3)

Line Impedance	
	None (leave blank)
X	3% Bus Reactor (1)
Z	5% Bus Reactor (1)
R	3% Input Reactor (2) (3)

(1) 3% and 5% Bus Reactors are only available as an option on base numbers up to and including P7B_D074, A068, and B040; larger drives have a Bus Reactor as standard.

(2) 3% Input Reactor, when combined with the standard Bus Reactor (available on base numbers P7B_D088, A080, and B052 and above), yields a total of 5% input impedance.

(3) The Input Reactor (R) and Load Reactor (K) cannot both be selected up to and including D114, A104, B124.

(4) Hand/Off/Auto is standard on all Bypass drives.

Bypass Option Descriptions:

(V, B) Enclosure: The drive and options are provided in either a NEMA Type 1 (V) ventilated or NEMA Type 12 FVFF (force ventilated fan filter) (B) enclosure, large enough to accommodate any or all of the package options. Enclosures for Base Numbers up to, and including, D114 (40HP, 208V), A104 (40HP, 240V),and B124 (100HP, 480V) are wall-mounted; larger drives are in floor-mount enclosures.

Options (Power)

(D, A) Motor Control: The standard configuration is for single motor control. Either one of two motors can be controlled with the 'OR' configuration, option (D). Simultaneous control of two identical motors is possible with the 'AND' configuration, option (A). Total motor FLA must not exceed the package rating.This option may require an oversized enclosure - see Dimensions and Data.

(N, E) Input Filter: The standard configuration does not include a filter. The cap filter, option (N), is a delta-wye capacitive network, while the RFI filter (E) provides noise attenuation to help meet CE requirements. This option requires the addition of the add-on box - see Dimensions and Data.

(F) Input Fuses: The standard configuration does not include Drive Input Fuses. This option provides high-speed semi-conductor drive input fuses, rated for 200,000 amp RMS symmetrical interrupting capacity, that provides both drive input I2T protection and NEC approved branch circuit and short circuit protection.

(X, Z, R) Line Impedance: Drives above Base Numbers D074 (25HP, 208V), A068 (25HP, 240V) and B040 (30HP, 480V) include a 3% DC bus reactor in the standard package and do not provide any additional impedance. Option (X), 3% impedance, and option (Z), 5% impedance, are not available for ratings larger than these. To achieve a 5% total input impedance, select option (R) - this 3% input reactor is available only for the HP ratings greater than the HP's listed above, and combines with the drive's standard DC bus reactor. If this option is combined with a drive that includes a bus reactor, the add-on box is required - see Dimensions and Data.

(K) Load Reactor: No form of output impedance is normally required. A 5% load reactor, option (K), is available if additional output impedance is desired (usually for long lead-lengths or noise reduction). This option may require the add-on box for wall-mount enclosures - see Dimensions and Data.

Options (Control and Communications)

(W) Custom Nameplates: Custom engraved nameplates with white lettering on black lamicoid are available with option (W), for special tagging purposes (Example: "AHU #1"). Note that this option requires the text to be specified by the customer. Leave this field blank if no special nameplates are required.

(S) Speed Pot: The drive's digital operator is always brought out to the front of the panel, so it is available for speed control - this is the standard configuration. A door-mounted 2.5K ohm speed potentiometer is available for manual speed control with option (S). This also includes a 2.5K ohm trim pot and is suitable for NEMA 1 and NEMA 12 installations.

(P) 3-15 PSI Transducer: No transducer is provided with the standard configuration. To add an optional transducer that accepts a 3-15 PSI pneumatic signal and converts it to a 4-20mA signal that is sent to the drive, specify option (P).

(M) 4-20mA Output: The standard Configured package provides two programmable 0-10VDC outputs. To convert these outputs to 4-20mA output signals, specify option (M).

(G, H, L, Q, 2, V, J, U) Communications: All configurations provide the hardware and software required for network communications, but these are not enabled in the standard configuration. Option (V) provides the programming and jumpers necessary to enable Modbus communications at no additional cost. DeviceNet option (G), Profibus option (H), Lonworks option (L), Modbus TCP/IP option (Q), and EtherNet/IP option (2) all require the addition of an optional board. Option (J) Johnson Controls METASYS N2 and option (U) Siemens APOGEE FLN require a software change, but no hardware change.