

SubDrive 15 / 75 - Pressure Controller

NEMA 3R NEMA 4

The SubDrive 15 is designed for three-phase motors to provide constant pressure with three-phase performance using single-phase input power. They have a high starting torque, easy to install, smooth running, just plug and play. Performance ranges from 3/4 hp to 5 hp. Indoor/outdoor NEMA 3R and NEMA 4 enclosure options. The fan kit is easily replaceable.

APPLICATIONS

SubDrive 15 constant pressure controller is designed for use in residential homes, schools, restaurants, car washes, farms, and landscape irrigation systems with a McDonald 3/4 HP pump end mounted to a 1½ HP, 230 volt A.Y. McDonald three phase motor.

FEATURES

- Constant water pressure with a wide range of settings (0-100 pressure transducer)
- Single-phase input power
- FE Connect Smartphone app for advanced settings and monitoring (NEMA 3R only)
- User-configurable motor frequency range (NEMA 3R only)
- Easy installation
- Soft-start feature prevents water hammer and increases motor life
- Works with small pressure tanks or existing larger tanks
- Advanced filtering to remove radio frequency interference
- UL and cUL listed
- Built-in diagnostics and protection
 - Surge protection
 - Undervoltage
 - Open circuit
 - Overheated controller
 - Underload
 - Locked pump
 - Short circuit
 - Broken pipe detection (NEMA 3R only)



SubDrive15 (NEMA 3R) - Indoor/Outdoor

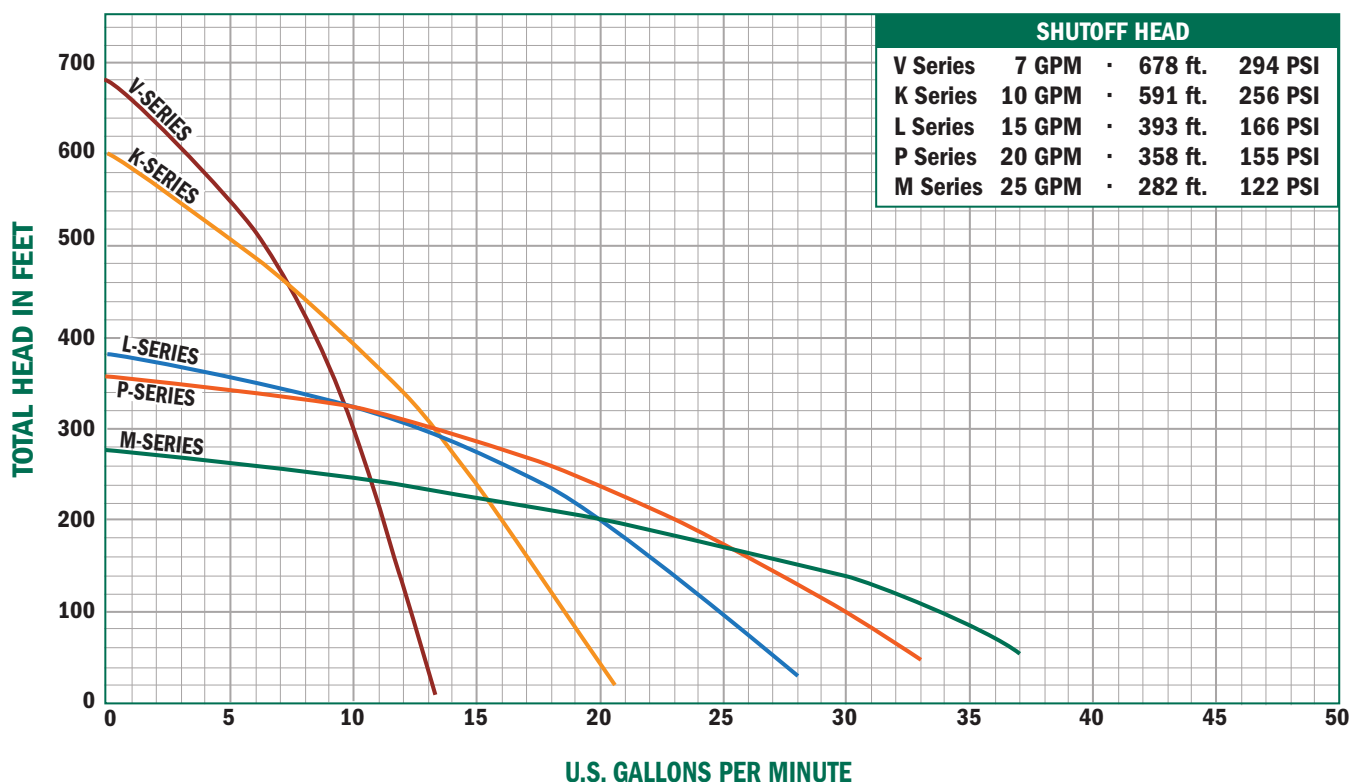
Model No.	Indoor/Outdoor	A.Y. Model # 6617-433 FE Model # 5870205103C	Pressure Setting	Factory Present	50 psi (3.4 bar)
Input from Power Source	Voltage	208/230 VAC		Operating Conditions ^(a)	Adjustment Range
	Phase In	Single-phase	Temperature (at 230 VAC input)		-13°F to 122°F (-25°C to 50°C)
	Frequency	60/50 Hz			
	Current (max)	12 Amps	Controller Size ^(b) (approximate)	Outer Dimensions Weight	9 3/4" x 19 3/4" x 5 1/4" (25 x 50 x 13 cm) 26 lbs (11.8 kg)
	Power Factor	~0.95		For Use With ^(c)	Pump (60 Hz)
	Power (idle)	4 Watts	A.Y. McDonald Motor		1/2 hp single-phase, three-wire 3/4 hp single-phase, three-wire 1 hp single-phase, three-wire 1 1/2 hp three-phase, three-wire
	Power (max)	2500 Watts			
	Wire Gauge Size(s)	Consult Federal, State, and Local codes for branch circuit installations			
	Output to Motor	Voltage	Adjusts with Frequency		
Phase Out		Single-phase (three-wire) OR Three-phase			
Frequency Range		30-77 Hz (3/4 hp, 0.55 kW) pump 30-72 Hz (1 hp, 0.75 kW) pump 30-60 Hz (1 1/2 hp, 1.1 kW) pump 30-63 Hz (Single-phase Motors)			
Current (max)		5.9 A / phase			
Wire Gauge Size(s)		#6 - #14* ga.			

Controller Rating	Part No.	Model No.
NEMA 3R (Indoor/Outdoor)	6617-433	SubDrive 15
NEMA 4 (Outdoor)	6617-156	SubDrive 75

SubDrive 15 / 75 - 21000/23000 E-Z Pac Packages

NEMA 3R

NEMA 4



NOTE: Performance shown does not include friction loss in drop pipe (for flow rates above 25 GPM, larger drop pipe is recommended.)

No-Lead Brass - 21000 Series

E-Z PAC (N3R)

N1 - (NEMA 3R), 1 1/4" NPT Connection on All Series

Model No.	Series	GPM	Wt.
21075VCP1EZ	V	7	65
21075KCP1EZ	K	10	58
21075LCP1EZ	L	15	58
21075PCP1EZ	P	20	59
21075MCP1EZ	M	25	56

E-Z PAC (N4)

N4 - (NEMA 4), 1 1/4" NPT Connection on All Series

Model No.	Series	GPM	Wt.
21075VCP4EZ	V	7	63
21075KCP4EZ	K	10	68
21075LCP4EZ	L	15	69
21075PCP4EZ	P	20	67
21075MCP4EZ	M	25	70

Stainless Steel - 23000 Series

E-Z PAC (N3R)

N1 - (NEMA 3R), 1 1/4" NPT Connection on All Series

Model No.	Series	GPM	Wt.
23075VCP1EZ	V	7	59
23075KCP1EZ	K	10	57
23075LCP1EZ	L	15	56
23075PCP1EZ	P	20	55
23075MCP1EZ	M	25	57

E-Z PAC (N4)

N4 - (NEMA 4), 1 1/4" NPT Connection on All Series

Model No.	Series	GPM	Wt.
23075VCP4EZ	V	7	61
23075KCP4EZ	K	10	67
23075LCP4EZ	L	15	67
23075PCP4EZ	P	20	64
23075MCP4EZ	M	25	59

The SubDrive 15 is designed to be part of a system that includes three main components:

1

Subdrive 15 controller
(pressure sensor included)
NEMA 3R - Part No. 6617-433
NEMA 4 - Part No. 6617-156
SubDrive 75



2

A.Y. McDonald 1 1/2 HP, 230V
three phase motor
Part No. 3132-531



3

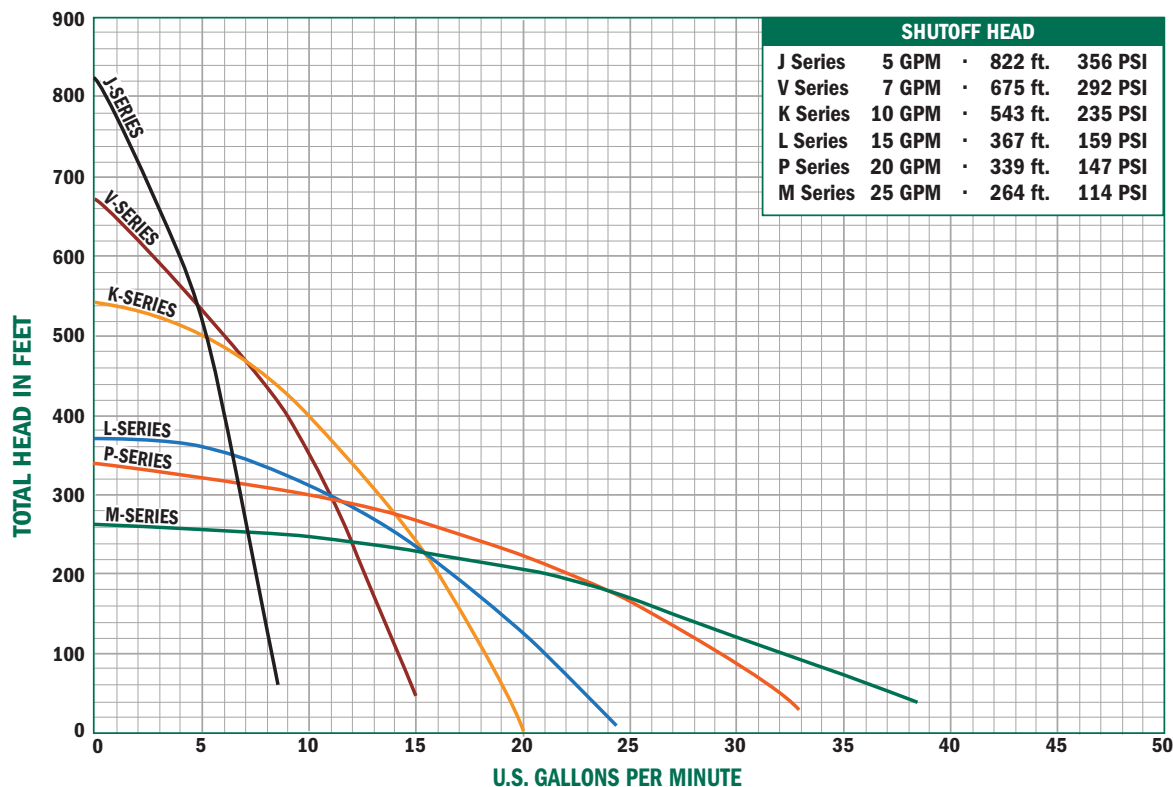
Appropriate pump end
Includes pump end 23075K
For example:
23075KCP1EZ



SubDrive 15 / 75 - 24000 E-Z Pac Packages

NEMA 3R

NEMA 4



NOTE: Performance shown does not include friction loss in drop pipe (for flow rates above 25 GPM, larger drop pipe is recommended.)

Stainless Steel - 24000 Series

E-Z PAC (N3R)

N1 - (NEMA 3R), 1 1/4" NPT Connection on All Series

Model No.	Series	GPM	Wt.
24075JCP1EZ	J	5	
24075VCP1EZ	V	7	59
24075KCP1EZ	K	10	57
24075LCP1EZ	L	15	56
24075PCP1EZ	P	20	55

E-Z PAC (N4)

N4 - (NEMA 4), 1 1/4" NPT Connection on All Series

Model No.	Series	GPM	Wt.
24075JCP4EZ	J	5	
24075VCP4EZ	V	7	61
24075KCP4EZ	K	10	67
24075LCP4EZ	L	15	67
24075PCP4EZ	P	20	64

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NEMA 4 - Part No. 6617-156
SubDrive 75



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24075KCP1EZ

