



Experience Reliability

- ◆ Magnetic Motor Starters
- ◆ Pump Control Panels
- ◆ Solid State Soft Starters
- ◆ Engineered Pump Controls



www.amclp.com

866-524-1050

Publication ICP-V25c

Control Panels for Water and Wastewater Pumps



APPLIED MOTOR CONTROLS is highly specialized in designing and building standard and custom-built **UL LISTED** pump control panels for use almost exclusively in water and waste water applications.

Our people's **experience** in, and dedication to, the water pumping industry; affords us a great deal of understanding of these applications, its requirements, and its market needs.

Applied Motor Controls builds **quality** pump control panels that provide superior protection and controls for municipal water systems, sewage lift stations, agricultural and turf irrigation, domestic water systems, contract dewatering, and most water pumping applications.

APPLIED MOTOR CONTROLS pump control panels are engineered to the latest standards of safety, and built with a high degree of craftsmanship. Uncluttered panel layouts allow for reasonable working space which can significantly simplify installation, commissioning and service.

Our **ONLY** business is pump control panels. **Since 2003** we have dedicated all of our resources to providing solutions for the water pumping industry.

YOU can rely on AMC—APPLIED MOTOR CONTROLS for well-built pump panels.

Experience Reliability



Numerical Index

Contents	Page
Magnetic Motor Starters – Full Voltage	1...2
Across-the-Line Pump Control Panels	3...4
Solid State Soft Start Pump Control Panels	5...6
Part-Winding Start Pump Control Panels	7...8
Options for Motor Starters & Pump Panels	9...10
Duplex Alternating Pump Control Panels	11...14
Simplex Sewage Lift Station Pump Panels	15...18
Duplex Sewage Lift Station Pump Panels	19...22
Technical Reference	23
Terms and Conditions of Sale	24



Magnetic Motors Starters



Shown with Hand/off/Auto Selector Switch

Product Description

Full Voltage - or Direct-on-Line - Motor Starters are designed to connect motors directly to the full motor voltage.

These starters provide the maximum torque in those applications where inrush current restrictions do not prevent their use.

Since the current drawn from the power lines by a motor started across-the-line is typically 600% of normal full load amps (running current), the current demand could cause unacceptable line voltage dips and potential brownouts.

In addition to high starting currents, the motor produces a starting torque which is higher than full load torque; thus, motors started across-the-line must be capable of withstanding the impact of the starting torque.

Standard Features

- Fully welded heavy-duty steel enclosure with screwed-on door and padlocking hasp
- Type 3R rating suitable for use outdoors. Rain and sleet resistant
- Top and Bottom mounting holes
- Concentric Conduit Knock-Outs at bottom of enclosure for power and controls wiring conduits
- Light Gray powder-coating finish suitable for use in outdoors environments
- Full Voltage Magnetic Motor Starter with optional choice of coil voltage
- Solid State Class 10 Overload Relay with adjustable trip point and inherent protection against loss of phase
- Suitable for use with submersible and above ground motors
- UL 508 Listed Industrial Controls
- Grounding Lug

Hand-Off-Auto (HOA) Switch Option

- Heavy Duty type 3R Selector Switch for selection of pump operating mode
- Fast-Acting Supplementary Fuses for protection of internal and external control circuit wiring against damage due to short circuits and ground faults

60 Hertz Motor		Starter Only		Starter with H-O-A Switch	
Motor Voltage	Horse Power Range	Part Number	List Price	Part Number	List Price
230V 1-Ph	1...2	FMSC16L16S	\$709	FMSC16L16SH	\$994
	2...5	FMSC30L45S	\$970	FMSC30L45SH	\$1,253
	2...7-1/2	FMSC43L45S	\$1,102	FMSC43L45SH	\$1,393
	5...10	FMSC60L90S	\$1,307	FMSC60L90SH	\$1,598
	5...15	FMSC85L90S	\$1,458	FMSC85L90SH	\$1,750
200V 3-Ph	1...3	FMSC16L16	\$709	FMSC16L16H	\$994
	3...7-1/2	FMSC30L45	\$970	FMSC30L45H	\$1,253
	3...10	FMSC43L45	\$1,102	FMSC43L45H	\$1,393
	7-1/2...15	FMSC60L90	\$1,307	FMSC60L90H	\$1,598
	7-1/2...20	FMSC85L90	\$1,458	FMSC85L90H	\$1,750
230V 3-Ph	1...3	FMSC16L16	\$709	FMSC16L16H	\$994
	3...7-1/2	FMSC30L45	\$970	FMSC30L45H	\$1,253
	3...10	FMSC43L45	\$1,102	FMSC43L45H	\$1,393
	7-1/2...20	FMSC60L90	\$1,307	FMSC60L90H	\$1,598
	7-1/2...25	FMSC85L90	\$1,458	FMSC85L90H	\$1,750
460V 3-PH	2...7-1/2	FMSC16B16	\$709	FMSC16B16H	\$994
	7-1/2...15	FMSC30B45	\$970	FMSC30B45H	\$1,253
	7-1/2...25	FMSC43B45	\$1,102	FMSC43B45H	\$1,393
	15...40	FMSC60B90	\$1,307	FMSC60B90H	\$1,598
	15...50	FMSC85B90	\$1,458	FMSC85B90H	\$1,750

1. Starter Coil Voltage is same as line voltage. Optional coil voltages available.
2. Call factory for HP and Voltages not shown
3. See Pages 11 & 12 for Options
4. For Start/Stop Pushbutton in lieu of the H-O-A Switch, Substitute suffix "H" with "SS"



Standard Features

- Type 3R enclosure for use outdoors. Rain and sleet resistant. Fully welded steel construction with hinged door and provisions for padlocking
- Light Gray powder-coating finish suitable for use in outdoors environments
- Choice of power disconnect type: Fusible Switch, or Circuit Breaker
- Fusible Disconnect Switches include factory-installed J-Class time-delay dual-element current-limiting power fuses
- Through the door rotary disconnect operator with provisions for padlocking in the off position
- Full Voltage Magnetic Motor Starter with optional choice of coil voltage
- Solid State Class 10 Overload Relay with adjustable trip point and inherent protection against loss of phase
- Suitable for use with submersible and above ground motors
- Fast-Acting Supplementary Fuses for protection of internal and external control circuit wiring against damage due to short circuits and ground faults
- 30mm Hand-Off-Auto Selector Switch
- UL 508 Listed Industrial Controls
- Suitable for use as Service Equipment

Product Description

An Across-the-Line pump control panel is a “combination starter” which combines a full voltage magnetic starter along with a fusible switch or a circuit breaker disconnect.

AMC pump panel line offers protection against short circuit faults, protection against motor overload faults, and means of disconnecting the controller and the motor from the supply power.

Across-the-Line starters are designed to connect motors directly to the full motor voltage and provide the maximum torque in those applications where inrush current restrictions do not prevent their use.

Since the current drawn from the power lines by a motor started across-the-line is typically 600% of normal full load amps (running current), power companies are increasingly limiting the use of full voltage starters to specific HP ranges.

60 Hz		Motor	Fused Switch Type		Circuit Breaker Type	
Motor Voltage	Horse Power Range	Part Number	List Price	Part Number	List Price	
230V 1-phase	1...1-1/2	P1.5231FVFR	\$1,951	P1.5231FVCR	\$2,289	
	2...3	P3231FVFR	\$2,182	P3231FVCR	\$2,527	
	5...7-1/2	P7.5231FVFR	\$2,678	P7.5231FVCR	\$2,862	
	10	P10231FVFR	\$3,445	P10231FVCR	\$3,758	
	15	P15231FVFR	\$3,877	P15231FVCR	\$4,223	
200V 3-phase	1...1-1/2	P1.5203FVFR	\$1,951	P1.5203FVCR	\$2,289	
	2...3	P3203FVFR	\$1,951	P3203FVCR	\$2,289	
	5...7-1/2	P7.5203FVFR	\$2,678	P7.5203FVCR	\$2,862	
	10...15	P15203FVFR	\$3,445	P15203FVCR	\$3,758	
	20...25	P25203FVFR	\$3,877	P25203FVCR	\$4,223	
230V 3-Phase	1...1-1/2	P1.5233FVFR	\$1,951	P1.5233FVCR	\$2,289	
	2...3	P3233FVFR	\$1,951	P3233FVCR	\$2,289	
	5...7-1/2	P7.5233FVFR	\$2,202	P7.5233FVCR	\$2,551	
	10...15	P15233FVFR	\$2,678	P15233FVCR	\$2,862	
	20	P20233FVFR	\$3,445	P20233FVCR	\$3,758	
	25	P25233FVFR	\$3,521	P25233FVCR	\$3,845	
460V 3-phase	1...1-1/2	P1.5463FVFR	\$1,951	P1.5463FVCR	\$2,289	
	2...3	P3463FVFR	\$1,951	P3463FVCR	\$2,289	
	5...7.5	P7.5463FVFR	\$1,951	P7.5463FVCR	\$2,289	
	10...15	P15463FVFR	\$2,202	P15463FVCR	\$2,551	
	20...25	P25463FVFR	\$2,431	P25463FVCR	\$2,649	
	30	P30463FVFR	\$2,678	P30463FVCR	\$2,862	
	40...50	P50463FVFR	\$3,521	P50463FVCR	\$3,845	
	60	P60463FVFR	\$3,877	P60463FVCR	\$4,223	

1. Fusible Type Panels include factory-installed J-Class Power Fuses
2. Unless otherwise specified, Starter Coil Voltage is same as line voltage
3. Call factory for HP and Voltages not shown
4. See Pages 11 & 12 for Options





Product Description

A Reduced Voltage Solid State Soft Starter pump control panel is a “combination starter” which combines a Solid State Motor Controller along with a fusible switch or a circuit breaker.

AMC soft start pump panels offer protection against short circuit faults, protection against motor overload faults, and means of disconnecting the motor and the controller from the power supply lines

Reduced Voltage Solid State motor starters are widely used in applications where reduced voltage starting is desired, or where the supplied power restricts the increments of current drawn from the supply lines.

These solid state controllers provide selectable and adjustable starting and stopping parameters making them suitable for use in a wide range of applications.

Standard Features

- Fully welded heavy-duty steel enclosure with gasketed hinged door and provisions for padlocking
- Type 3R rating suitable for use outdoors. Rain and sleet resistant. Weatherproof
- Light Gray powder-coating finish suitable for use in outdoors environments
- Choice of power disconnect type: Fusible Switch, or Circuit Breaker
- Fusible Disconnect Switches include factory-installed J-Class time-delay dual-element current-limiting power fuses
- Through the door rotary disconnect operator with provisions for padlocking in the off position
- Soft Start Solid State Motor Controller with Built-In SCR Bypass Contactor
- Electronic Motor Overload Protection
- 120V Control Circuit Transformer with primary and secondary protective fuses
- Hand-Off-Auto Selector Switch
- Terminal Block for ease of wiring to and from a remote control device
- UL 508 Listed Industrial Controls
- Suitable for use as Service Equipment

3 Phase Motor		Fusible Switch Type		Circuit Breaker Type	
Motor Voltage	Maximum Horse Power	Part Number	List Price	Part Number	List Price
230V 60HZ	10	P10233SSFRS	\$7,830	P10233SSCRS	\$8,575
	15	P15233SSFRS	\$7,862	P15233SSCRS	\$8,597
	20	P20233SSFRS	\$9,396	P20233SSCRS	\$10,238
	25	P25233SSFRS	\$9,396	P25233SSCRS	\$10,238
	30	P30233SSFRS	\$9,612	P30233SSCRS	\$10,476
	40	P40233SSFRS	\$17,604	P40233SSCRS	\$19,667
	50	P50233SSFRS	\$17,604	P50233SSCRS	\$19,667
	60	P60233SSFRS	\$20,196	P60233SSCRS	\$22,572
460V 60HZ	15	P15463SSFRS	\$6,156	P15463SSCRS	\$6,588
	20	P20463SSFRS	\$7,830	P20463SSCRS	\$8,575
	25	P25463SSFRS	\$7,862	P25463SSCRS	\$8,597
	30	P30463SSFRS	\$7,862	P30463SSCRS	\$8,597
	40	P40463SSFRS	\$9,396	P40463SSCRS	\$10,238
	50	P50463SSFRS	\$9,396	P50463SSCRS	\$10,238
	60	P60463SSFRS	\$9,612	P60463SSCRS	\$10,476
	75	P75463SSFRS	\$14,688	P75463SSCRS	\$16,016
	100	P100463SSFRS	\$17,604	P100463SSCRS	\$19,667
	125	P125463SSFRS	\$20,196	P125463SSCRS	\$22,572
	150	P150463SSFRS	\$23,220	P150463SSCRS	\$26,028
	200	P200463SSFRS	\$26,330	P200463SSCRS	\$29,419

1. Fusible Type Panels include J-Class Power Fuses
2. Contact AMC for use with Submersible Motor applications.
3. Contact AMC for HP and Voltages not shown
4. See Pages 11 & 12 for Options





Product Description

A Part-Winding pump control panel is a “combination starter” which combines a part-winding magnetic starter along with a fusible switch or a circuit breaker.

AMC pump panel line offers protection against short circuit faults, protection against motor overload faults, and means of disconnecting the motor and the controller from the power supply lines

Part-Winding motor starters (or two-step starters) provide economical reduced current starting in applications where the supplied power restricts the increments of current drawn from the lines, and a simple method of accelerating loads with low starting torque.

These controllers require a motor suitable for Part-Winding Starting.

Standard Features

- Fully welded heavy-duty steel enclosure with gasketed hinged door and provisions for padlocking. Gray powder-coating finish suitable for use in outdoors environments
- Type 3R rating suitable for use outdoors. Rain and sleet resistant. Top and bottom brackets for wall or pole mounting
- Choice of power disconnect type: Fusible Switch, or Circuit Breaker
- Fusible Disconnect Switches include factory-installed J-Class time-delay dual-element current-limiting power fuses
- Through the door disconnect operator with provisions for padlocking in the off position
- Part-Winding Magnetic Motor Starter with choice of coil voltage
- (2) Solid State Class 10 Overload Relays with adjustable trip point and inherent protection against loss of phase
- Fast-Acting Supplementary Fuses for protection of internal and external control circuit wiring against damage due to short circuits and ground faults
- Hand-Off-Auto Selector Switch
- Terminal Block for ease of wiring to and from a remote control device
- UL 508 Listed Industrial Controls
- Suitable for use as Service Equipment

3 Phase		Motor	Fused Switch Type		
Motor Voltage	Maximum Horse Power	Part Number	List Price		
230V 60HZ	10	P10233PWFR	\$4,709		
	15	P15233PWFR	\$4,957		
	20	P20233PWFR	\$5,724		
	25	P25233PWFR	\$5,724		
	30	P30233PWFR	\$6,426		
	40	P40233PWFR	\$7,841		
	50	P50233PWFR	\$8,284		
	60	P60233PWFR	\$8,705		
460V 60HZ	20	P20463PWFR	\$4,709		
	25	P25463PWFR	\$4,709		
	30	P30463PWFR	\$4,957		
	40	P40463PWFR	\$5,724		
	50	P50463PWFR	\$5,724		
	60	P60463PWFR	\$6,426		
	75	P75463PWFR	\$7,841		
	100	P100463PWFR	\$8,284		
	125	P125463PWFR	\$8,705		
	150	P150463PWFR	\$16,524		
	200	P200463PWFR	\$19,634		

1. Fusible Type Panels include J-Class Power Fuses
2. Unless otherwise specified, Starter Coil Voltage is same as line voltage
3. Call factory for HP and Voltages not shown
4. See Pages 11 & 12 for Options

Description	Option Code	List Price
Control Circuit Transformer With Primary & Secondary Protective Fuses		
208/240/480 - 120V @ 50VA	CT50	\$ 598
208/240/480 - 120V @ 100VA	CT100	\$ 667
208/240/480 - 120V @ 150VA	CT150	\$ 702
208/240/480 - 120V @ 300VA	CT300	\$ 793
208/240/480 - 120V @ 500VA	CT500	\$ 898
Interposing Relay For separate control voltage input (* ** Specify required Voltage when ordering)	IR-**	Contact AMC
Time Delay Relay, Solid State (* ** Specify required function when Ordering) Note: This option requires a control circuit transformer	TD-**	Contact AMC
Programmable Time Clock 24 Hour, 7 Day function Note: This option requires a control circuit transformer	TC	Contact AMC
Liquid Level Relay, Solid State (* ** Specify required function when ordering) Note: This option requires a control circuit transformer	LLR-**	Contact AMC
Indicating Light Specify Function and Lens color when ordering (ie: run/red)	PL-**	Contact AMC
Electronic Programmable Overload Relay Protects 3 Phase Motors against: Overload, Underload, High Voltage, Low Voltage, Loss of Phase, Phase Reversal, Phase & Voltage, Unbalance, Rapid Cycling, and Ground Fault		
Motor Full Load Amps: 2 - 90 Amps	DEOL	Contact AMC
Motor Full Load Amps: 91 - 600 Amps (includes current transformers)	CTEOL	Contact AMC

Description	Option Code	List Price
Phase & Voltage Monitor Protects Three Phase motors against: High Voltage, Low Voltage, Phase Reversal, Loss of Phase, and Unbalance	PMR	Contact AMC
Surge Protective Device Offers a degree of protection against damage due to lightning strikes	SPD	Contact AMC
Low Suction Cut-Off Option includes a Terminal Block for remote pressure switch, a Red Indicating Light, and a Timing Relay to prevent nuisance tripping Note: This option requires a Control Circuit Transformer	LSC	Contact AMC
High Pressure Shutdown Option includes a Terminal Block for remote pressure switch, a Red Indicating Light, and manual Reset Pushbutton Note: This option requires a Control Circuit Transformer	HPS	Contact AMC
Cycle Counter, Digital Records number of times a motor has been called to run Note: This option requires a control circuit transformer	CC	Contact AMC
Elapsed Hour Meter, Electro Mechanical Records motor running time in Hours, Non Reset, 99999.9 Hours Note: This option requires a control circuit transformer	ETM	Contact AMC
NEMA Type 4 Steel Enclosure Water & Dust-Tight, Outdoors	N4	Contact AMC
NEMA Type 4X Stainless Steel Enclosure Water & Dust-Tight, Outdoors, Corrosion-Resistant	N4XS	Contact AMC
NEMA Type 4X Fiberglass-Reinforced Polyester Enclosure Water & Dust-Tight, Outdoors, Corrosion-Resistant	N4XF	Contact AMC
Starter Auxiliary Contacts 1 N/O & 1N/C contacts interlocked with starter Specify if contacts are to be “dry” or “powered”	AUX	Contact AMC

Duplex Alternating Pump Control Panels



Product Description

Duplex Pump Controls Panels are designed to operate and control two booster pump motors on single system.

These panels are widely used in those applications where maintaining a specific system pressure is required.

Applied Motor Controls' standard duplex pump panel is designed to provide both "alternating" and "duplexing" modes.

Alternating mode: This function provides for relatively equal wear of the two pump motors, typically of the same HP rating, driven by the controller by reversing the "Lead" and "Lag" roles of the motors on each successive cycle. Automatic alternation is accomplished when one or both motors come to a stop.

Duplexing mode: This mode provides stand-by capacity for use of a second pump motor when the system demand exceeds the normal requirements of a single motor, or when one of the motors fail.

NOTE:

For options and voltages not listed, please contact AMC.
We offer a wide range of options to meet specific requirements

Standard Features

- Fully welded heavy-duty steel enclosure with gasketed hinged door and provisions for padlocking
- Type 3R rating suitable for use outdoors. Rain and sleet resistant. Weatherproof
- Light Gray powder-coating finish suitable for use in outdoors environments
- Power Terminal Block for termination of line supply cables
- Choice of two disconnects: Fusible Switches with J-Class Factory-installed power fuses, or Thermal-Magnetic Molded Case Circuit Breakers
- (2) Through the door disconnect operators with provisions for padlocking in the off position
- (2) Full Voltage Magnetic Motor Starters with 120VAC coil voltage
- (2) Solid State Class 10 Overload Relays with adjustable trip point and inherent protection against loss of phase
- Solid State Duplex Alternator with Alternating and Duplexing functions
- 120V Control Circuit Transformer with primary and secondary protective fuses
- (2) Hand-Off-Auto Selector Switches
- (2) Terminal Blocks for two remote pressure switches
- UL 508 Listed Industrial Controls

Duplex Alternating Pump Control Panels

3 Phase Motor		Fusible Switch Type		Circuit Breaker Type	
Motor Voltage	Maximum Horse Power	Part Number	Price	Part Number	Price
200V 60HZ	3	DP3203FVFR	Contact AMC	DP3203FVCR	Contact AMC
	5	DP5203FVFR	Contact AMC	DP5203FVCR	Contact AMC
	7 - 1/2	DP7203FVFR	Contact AMC	DP7203FVCR	Contact AMC
	10	DP10203FVFR	Contact AMC	DP10203FVCR	Contact AMC
	15	DP15203FVFR	Contact AMC	DP15203FVCR	Contact AMC
	20	DP20203FVFR	Contact AMC	DP20203FVCR	Contact AMC
	25	DP25203FVFR	Contact AMC	DP25203FVCR	Contact AMC
230V 60HZ	3	DP3233FVFR	Contact AMC	DP3233FVCR	Contact AMC
	5	DP5233FVFR	Contact AMC	DP5233FVCR	Contact AMC
	7 - 1/2	DP7233FVFR	Contact AMC	DP7233FVCR	Contact AMC
	10	DP10233FVFR	Contact AMC	DP10233FVCR	Contact AMC
	15	DP15233FVFR	Contact AMC	DP15233FVCR	Contact AMC
	20	DP20233FVFR	Contact AMC	DP20233FVCR	Contact AMC
	25	DP25233FVFR	Contact AMC	DP25233FVCR	Contact AMC
460V 60HZ	3	DP3463FVFR	Contact AMC	DP3463FVCR	Contact AMC
	5	DP5463FVFR	Contact AMC	DP5463FVCR	Contact AMC
	7 - 1/2	DP7463FVFR	Contact AMC	DP7463FVCR	Contact AMC
	10	DP10463FVFR	Contact AMC	DP10463FVCR	Contact AMC
	15	DP15463FVFR	Contact AMC	DP15463FVCR	Contact AMC
	20	DP20463FVFR	Contact AMC	DP20463FVCR	Contact AMC
	25	DP25463FVFR	Contact AMC	DP25463FVCR	Contact AMC
	30	DP30463FVFR	Contact AMC	DP30463FVCR	Contact AMC
	40	DP40463FVFR	Contact AMC	DP40463FVCR	Contact AMC
	50	DP50463FVFR	Contact AMC	DP50463FVCR	Contact AMC

1. Fusible Type Panels include J-Class Power Fuses
2. Unless otherwise specified, Starters Coil Voltage 120VAC
3. Call factory for HP and Voltages not shown
4. See Pages 15 & 16 for Options



Description	Option Code	List Price
Low Suction Cut-Off Option includes a terminal block for remote pressure switch, a Red Indicating Light, and a Timing Relay	LSC	Contact AMC
Low Pressure Alarm Option includes a terminal block for remote pressure switch, a Red Indicating Light, and a Timing Relay	LSP	Contact AMC
High Pressure Shutdown Option includes a terminal block for remote pressure switch, a Red Indicating Light, and manual Reset Pushbutton	HPS	Contact AMC
Interposing Relay For use with separate control voltage (** Indicate required Voltage when ordering)	IR-**	Contact AMC
Time Delay Relay (** Indicate required function when Ordering)	TD-**	Contact AMC
Programmable Time Clock 24 Hour, 7 Day function	TC	Contact AMC
Elapsed Hour Meter 99999.9 Hours, Non Reset Qty (2)	ETM	Contact AMC
Cycle Counter 6 Digits, Non Reset Qty (2)	CC	Contact AMC
Indicating Light (** Indicate Lens color and Function when ordering)	PL-**	Contact AMC

Description	Option Code	List Price
Phase & Voltage Monitor Protects 3-Phase motors against: High Voltage, Low Voltage, Phase Reversal, Loss of Phase, and Unbalance	PMR	Contact AMC
Surge Protective Device	SPD	Contact AMC
Starter Auxiliary Contacts—DRY Option includes 1-N.O. & 1-N.C. Auxiliary Dry Contacts for interfacing with remote monitoring Quantity Two Sets (one per starter)	PAUX	Contact AMC
Starter Auxiliary Contacts-POWERED Option includes 1-N.O. Auxiliary Powered Contact for interfacing with remote load (i.e.: chemical feed pump) Quantity Two Sets (one per starter)	DAUX	Contact AMC
Electronic Programmable Overload Relay, Motor Saver 777 Protects 3-Phase Motors against: Overload, Underload, High Voltage, Low Voltage, Loss of Phase, Phase Reversal, Phase & Voltage Unbalance, Rapid Cycling, and Ground Fault Quantity Two <p style="text-align: center;"><u>Motor Full Load Amps:</u></p> <p style="text-align: center;">2 - 90 Amps</p>	DEOL	Contact AMC
External Electric Reset Pushbutton for Motor Saver 777 Quantity Two	EOLR	Contact AMC
Deduct for Auto Duplex Alternator	NALT	Contact AMC
Terminal Block 3P, 600V, 30 AMPS (Specify Function)	TB	Contact AMC

Simplex Sewage Lift Station Pump Panels



Product Description

Simplex Lift Station Pump Control Panels are designed to control the level in a municipal or industrial de-watering Lift Station housing a single pump.

When the level rises to a predetermined level, as sensed by an external level sensor (ie: float switch), the pump is turned on. As the level recedes to a predetermined level, as sensed by a level sensor, the pump is turned off.

A “Simplex” panel consist of a single across-the-line combination motor starter which provides protection against short circuit faults, motor overload faults, motor disconnecting means, and means to automatically turning the pump motor on/off.

Typical applications include sewage lift stations, storm drain lift station, or any installation where de-watering is required.

Applied Motor Controls’ Simplex Lift Station Pump Panels can be designed to incorporate a wide selection of power, monitoring and control options meant to enhance the protection or performance of the pump, or to meet the most demanding job specifications.

Standard Features

- UL 508 Listed Industrial Control serialized label
- UL type 3R Outdoor Painted Steel Enclosure Fully gasketed hinged door with provision for padlocks
- Top and bottom brackets for wall or pole mounting
- Gray powder-coating finish suitable for use in harsh environments
- Molded Case Circuit Breaker with Thermal-Magnetic Trip (Optional Fusible Switch with Fuses available)
- External Handle mechanism interlocked to door for Circuit Breaker. Handle features provisions for up to 3 padlocks when in the “off”, and prevents door opening when in the “on” position
- Full Voltage Magnetic Motor Starter with 120VAC coil
- Solid State Overload Relay with adjustable trip point and inherent protection against loss of phase
- 120V Control Circuit Transformer with primary & secondary protective fuses
- Hand-Off-Auto Selector Switch
- Terminal Blocks for two remote Float Switches: Pump Off, Pump On
- Grounding Lug

NOTE:

For options and voltages not listed, please contact AMC.
We offer a wide range of options to meet specific requirements

Simplex Sewage Lift Station Pump Panels

3 Phase Motor			
Motor Voltage	Maximum Horse Power	Part Number	Price
230V 60HZ	1	SPX1233C	Contact AMC
	1 - 1/2	SPX1.5233C	Contact AMC
	2	SPX2233C	Contact AMC
	3	SPX3233C	Contact AMC
	5	SPX5233C	Contact AMC
	7-1/2	SPX7233C	Contact AMC
	10	SPX10233C	Contact AMC
	15	SPX15233C	Contact AMC
	20	SPX20233C	Contact AMC
	25	SPX25233C	Contact AMC
460V 60HZ	1	SPX1463C	Contact AMC
	1 - 1/2	SPX1.5463C	Contact AMC
	2	SPX2463C	Contact AMC
	3	SPX3463C	Contact AMC
	5	SPX5463C	Contact AMC
	7 - 1/2	SPX7463C	Contact AMC
	10	SPX10463C	Contact AMC
	15	SPX15463C	Contact AMC
	20	SPX20463C	Contact AMC
	25	SPX25463C	Contact AMC
	30	SPX30463C	Contact AMC
	40	SPX40463C	Contact AMC
	50	SPX50463C	Contact AMC

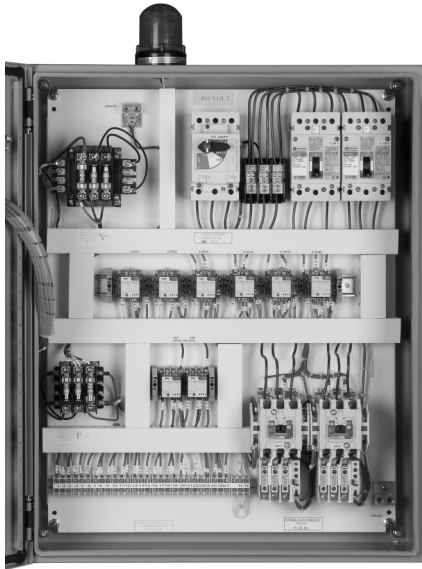
See Page 19 & 20 for Factory Modifications

Description	Option Code	List Price
Dead-front Enclosure Construction Tamper-proof design with Swing-out inner door and Lockable outer door	A	Contact AMC
NEMA/UL Type 4 Enclosure Steel, Water & Dust-Tight, Indoor/Outdoor use	B	Contact AMC
NEMA/UL Type 4X Fiberglass-Reinforced Polyester, Water & Dust-Tight, Indoor/Outdoor use, Corrosion-Resistant	C	Contact AMC
NEMA/UL Type 4X 304 Stainless Steel, Water & Dust-Tight, Indoor/Outdoor, Corrosion-Resistant	D	Contact AMC
Anti-Condensation Cabinet Heater 100 Watt, Fan-Driven, with integral adjustable thermostat	E	Contact AMC
Elapsed Hour Meter 99999.9 Hours, Non-Reset, door mounted	F	Contact AMC
Pump Running Indicating Light Green Lens, door mounted	G	Contact AMC
Auxiliary Contacts 1-N.O./1-N.C. for remote monitoring of pump status	H	Contact AMC
Motor Seal Failure Indicating Light Amber Lens, door mounted - Option requires Moisture Detecting Relay	I	Contact AMC
Moisture Detecting Relay Relay Monitors a Seal Failure condition in the motor. Unless otherwise specified, the standard design will not shut-down pump.	J	Contact AMC

Description	Option Code	List Price
Motor Over-Temperature Shutdown Terminal Block for thermal switch in motor. Motor shutdown with auto reset	K	Contact AMC
Motor Over-Temperature Indicating Light Relay and Red Indicating Light, door mounted, auto reset	L	Contact AMC
Time Delay Relay Solid State, Multi-Function (on-delay, off-delay, single-shot, recycling)	M	Contact AMC
Phase & Voltage Monitor Protection against Low & High Voltage, Unbalance, Phase Loss & Reversal	N	Contact AMC
Surge/Lightning Protective Device	O	Contact
High Water Alarm Beacon Light NEMA type 4X, Top mounted, Red Beacon, Tamper-proof, Halogen Lamp	P	Contact AMC
High Water Alarm Horn NEMA type 4X, Side mounted, 103dB @ 10 Ft., adjustable output, with silencing pushbutton	Q	Contact AMC
High Water Alarm Dry-Contact 1-N.O. Contact for remote monitoring of alarm status	R	Contact AMC
Convenience Receptacle GFCI, 120V, 15 Amp, with weather-proof cover	S	Contact AMC
Intrinsically Safe Relay: Interfaces with on/off floats Note: A separate ISR is required for High or Low Water Alarm	T	Contact AMC
Auxiliary Control Relay	U	Contact
Push-to-Test Pilot Light	V	Contact



Duplex Sewage Lift Station Pump Panels



Shown with Options

Product Description

Duplex Lift Station Pump Control Panels are designed to control the level in a municipal or industrial de-watering Lift Station housing two pumps.

When the level rises to a predetermined level, as sensed by an external level sensor (ie: float switch), the “lead pump” is turned on first. As the level recedes to a predetermined level, as sensed by a level sensor, the lead pump is turned off and automatic alternation is accomplished.

In the event that the level continues to rise beyond the capacity of the lead pump, the “lag” pump is turned on, and both pumps will run simultaneously until the level recedes to the pumps off level as sensed by a level sensor.

Applied Motor Controls’ Duplex Lift Station Pump Panels can be designed to incorporate a wide selection of power and control options meant to enhance the protection and performance of the pumps, or to meet the most demanding specifications.

NOTE:

For options and voltages not listed, please contact AMC.
We offer a wide range of options to meet specific requirements

Standard Features

- UL 508 Listed Industrial Control serialized label
- UL type 3R Outdoor Steel Enclosure Fully gasketed hinged door with provision for padlocks, and top & bottom brackets for wall or pole mounting
- Gray powder-coating finish suitable for use in harsh environments
- Power Terminal Block for termination of supply cables
- (2) Molded Case Circuit Breakers with Thermal-Magnetic Trip (Optional Fusible Switch with Fuses available)
- (2) External Handle mechanisms for Circuit Breakers. Handle features provisions for up to 3 padlocks when in the “off”, and prevents door opening when in the “on” position
- (2) Full Voltage Magnetic Motor Starters with 120VAC coil
- (2) Solid State Overload Relays with adjustable trip point and inherent protection against loss of phase and unbalance
- 120V Control Circuit Transformer with primary & secondary protective fuses
- Solid State Duplex Alternator
- (2) Hand-Off-Auto Selector Switches
- Terminal Blocks for three remote Float Switches: Pumps Off, Lead Pump On, Lag Pump On

Duplex Sewage Lift Station Pump Panels

3 Phase Motor			
Motor Voltage	Maximum Horse Power	Part Number	List Price
230V 60HZ	1	DPX1233C	Contact AMC
	1 - 1/2	DPX1.5233C	Contact AMC
	2	DPX2233C	Contact AMC
	3	DPX3233C	Contact AMC
	5	DPX5233C	Contact AMC
	7-1/2	DPX7233C	Contact AMC
	10	DPX10233C	Contact AMC
	15	DPX15233C	Contact AMC
	20	DPX20233C	Contact AMC
	25	DPX25233C	Contact AMC
460V 60HZ	1	DPX1463C	Contact AMC
	1 - 1/2	DPX1.5463C	Contact AMC
	2	DPX2463C	Contact AMC
	3	DPX3463C	Contact AMC
	5	DPX5463C	Contact AMC
	7 - 1/2	DPX7463C	Contact AMC
	10	DPX10463C	Contact AMC
	15	DPX15463C	Contact AMC
	20	DPX20463C	Contact AMC
	25	DPX25463C	Contact AMC
	30	DPX30463C	Contact AMC
	40	DPX40463C	Contact AMC
	50	DPX50463C	Contact AMC

See Page 23 & 24 for Factory Modifications

Description	Option Code	List Price
Dead-front Enclosure Construction Tamper-proof design with Swing-out inner door and Lockable outer door	A	Contact AMC
NEMA/UL Type 4 Enclosure Steel, Water & Dust-Tight, Indoor/Outdoor	B	Contact AMC
NEMA/UL Type 4X Enclosure Fiberglass-Reinforced Polyester, Water & Dust-Tight, Indoor/Outdoor, Corrosion-Resistant	C	Contact AMC
NEMA/UL Type 4X Enclosure 304 Stainless Steel, Water & Dust-Tight, Indoor/Outdoor, Corrosion-Resistant	D	Contact AMC
Cabinet Heater 100 Watt, Fan-Driven, with integral adjustable thermostat	E	Contact AMC
Elapsed Hour Meters Qty (2) 99999.9 Hours, Non-Reset, door mounted	F	Contact AMC
Pump Running Indicating Lights Qty (2) Green Lens, door mounted	G	Contact AMC
Auxiliary Contacts Qty (2) 1-N.O./1-N.C. for remote monitoring of pump status	H	Contact AMC
Motor Seal Failure Indicating Lights Qty (2) Amber Lens, door mounted - Option requires Moisture Detecting Relays	I	Contact AMC
Moisture Detecting Relays Qty (2) Relays Monitor a Seal Failure condition in the motor (s). Unless otherwise specified, the standard design will not shut-down pump (s).	J	Contact AMC

Description	Option Code	List Price
Motor Over-Temperature Shutdown Qty (2) Terminal Blocks for thermal switches in motor. Shutdown with auto reset	K	Contact AMC
Motor Over-Temperature Indicating Lights Qty (2) Relays and Red Indicating Lights, door mounted, auto reset	L	Contact AMC
Time Delay Relay Solid State, Multi-Function (on-delay, off-delay, single-shot, recycling)	M	Contact AMC
Phase & Voltage Monitor Protection against Low & High Voltage, Unbalance, Phase Loss & Reversal	N	Contact AMC
Surge/Lightning Protective Device	O	Contact
High Water Alarm Beacon Light NEMA type 4X, Top mounted, Red Beacon, Tamper-proof, Halogen Lamp	P	Contact AMC
High Water Alarm Horn NEMA type 4X, Side mounted, 103dB @ 10 Ft., adjustable output, with silencing pushbutton	Q	Contact AMC
High Water Alarm Dry-Contact 1-N.O. Contact for remote monitoring of alarm status	R	Contact AMC
Convenience Receptacle GFCI, 120V, 15 Amp, with weather-proof cover	S	Contact AMC
Intrinsically Safe Controller Interfaces with up to 5 Float Switches, integral alternator	T	Contact AMC
Auxiliary Control Relay	U	Contact
Push-to-Test Pilot Light	V	Contact

Technical Information

Enclosure Ratings

UL and NEMA are standard writing organizations commonly recognized in North America. Their ratings are based on similar application descriptions and expected performance. UL requires independent testing by qualified evaluators. NEMA, on the other hand, does not require independent testing and leaves compliance completely up to manufacturer.

Standards

Enclosure Rating	NEMA (Standard 250)	UL (UL50 and UL508)
Type 1	Enclosures intended for indoor use primarily to provide a degree of protection against contact with the enclosed equipment or locations where unusual service conditions do not exist.	Indoor use primarily to provide protection against contact with the enclosed equipment and against a limited amount of falling dirt
Type 3	Enclosures intended for outdoor use primarily to provide a degree of protection against windblown dust, rain, and sleet. Undamaged by the formation of ice on the enclosure.	Outdoor use to provide a degree of protection against windblown dust and windblown rain. Undamaged by the formation of ice on the enclosure.
Type 3R	Enclosures intended for outdoor use primarily to provide a degree of protection against falling rain and sleet. Undamaged by the formation of ice on the enclosure.	Outdoor use to provide a degree of protection against falling rain. Undamaged by the formation of ice on the enclosure.
Type 4	Enclosures intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust and rain, splashing water, and hose-directed water. Undamaged by the formation of ice on the enclosure.	Either indoor or outdoor use to provide a degree of protection against falling rain, splashing water, and hose-directed water. Undamaged by the formation of ice on the enclosure.
Type 4X	Enclosures intended for indoor or outdoor use primarily to provide a degree of protection against corrosion, windblown dust and rain, splashing water, and hose-directed water. Undamaged by the formation of ice on the enclosure.	Either indoor or outdoor use to provide a degree of protection against falling rain, splashing water, and hose-directed water. Undamaged by the formation of ice on the enclosure. Resists corrosion.
Type 12	Enclosures intended for indoor use primarily to provide a degree of protection against dust, falling dirt, and dripping non-corrosive liquids.	Indoor use to provide a degree of protection against dust, dirt, fiber flyings, dripping water, and external condensation of non-corrosive liquids.

Terms & Conditions of Sale

Applied Motor Controls (hereinafter called “Seller”) agrees to sell the goods covered herein on the following terms and conditions of sale. Any additional or different terms that may be contained in any documents furnished by the Buyer are hereby objected to and rejected. Buyer’s acceptance of the Goods will manifest Buyer’s assent to these terms and conditions.

1. **Warranty:** The Seller warrants its products and equipment to be free from defects in material and workmanship. If within ONE YEAR FROM DATE OF START UP, BUT NO MORE THAN EIGHTEEN MONTHS FROM THE ORIGINAL DATE OF SHIPMENT from Seller’s factory, any failure to conform with this warranty appears within such time, Seller shall, if given prompt notice by Buyer, correct such non-conformity either by repair or replacement of the non-conforming product or part, F.O.B. repair facility. **The seller is not responsible for damage to its products through normal wear and tear, improper installation, unauthorized alterations or repairs, lack of proper maintenance, improper use, or attempts to operate outside its rated capacity.**

2. **Orders:** Orders are subject to acceptance at home office of the Seller

3. **Payments:** With Approved Credit, payment is due in full on the date stated on Invoice. Seller may require full or partial payment in advance. If the Buyer fails to pay any invoice when due, Seller may defer delivery. A service charge, the lesser of the highest allowed by law or 1.5% per month, or fraction thereof, for a maximum of 18% per annum will be charged on all past-due invoices.

4. **Prices:** Prices are subject to change without notice. Prices will be the prices in effect at the time of shipment by Seller.

5. **Taxes:** Prices do not include any taxes. In the event Seller is required to pay any taxes, the Buyer shall reimburse Seller therefore, unless Buyer provides Seller at the time an order is submitted with exemption certificates or other documents acceptable to taxing authorities.

6. **Shipments and Delivery:** Shipments are made F.O.B. Seller’s shipping point. All material is carefully packed for shipment. Risk of loss or damage and responsibility shall pass from Seller to Buyer upon shipment. While Seller will use reasonable efforts to maintain delivery dates acknowledged or quoted by Seller, all shipping dates are approximate and not guaranteed.

7. **Returns for Credit:** NO returns for credit shall be accepted unless Seller’s written permission has been obtained in each case in advance, and within the warranty period. Only standard products from Seller’s regular line which are in active demand may be accepted for credit. Credits shall not be issued for custom-built or modified products. Credit amount will be based on invoiced price, subject to reasonable deduction for handling and for restoration of goods to salable condition.

8. **Limitation of Liability:** Buyer agrees that in no event shall Seller’s liability to buyer and/or its customers tend to include incidental, consequential, or punitive damages. The term “consequential damages” shall include, but not limited to, loss of anticipated profits, loss of use, loss of revenue, cost of capital, and damage or loss of other property or equipment.

9. **Errors:** All clerical errors are subject to corrections

10. **Effective Date:** March 1, 2025

Engineered UL Listed Pump Controls Panels



Applied Motor Controls, Ltd.
319 Wolfe Road
San Antonio, TX 78216 • USA

Tel: (210) 524-1050
Fax: (210) 524-1044

Email: info@amclp.com



Publication ICP-V25c

www.amclp.com



Quality Pumping Solutions Since 2003
20+ Years of Experience and Reliability