3 Phase Controls and Heaters

Magnetic Starters



For use with three phase 4" motors in Nema I enclosure.

A.Y. McDONALD PART NO.	MOTOR	HP	VOLTS	FURNAS NO
3131-257	4"	1/2 - 5	200/208	16BF35BD4
3131-226	4"	1/2 - 7.5	230	16BF35BG4
3131-261	4"	1/2 - 10	460	16AF35BH4
3131-278	4"	1/2 - 10	575	16AF35BE4
3131-257	6"	5 - 7.5	200/208	16BF35BD4
3131-226	6"	5 - 7.5	230	16BF35BG4
3131-261	6"	5 - 7.5	460	16AF35BH4
3131-262	6"	10	200/208	16CF35BD4
3131-263	6"	10	230	16CF35BG4
3131-261	6"	10	460	16AF35BH4
3131-264	6"	15	200/208	16EF35BD4
3131-265	6"	15	230	16DF35BG4
3131-261	6"	15	460	16AF35BH4
3131-266	6"	20	200/208	16FE35BD81
3131-267	6"	20	230	16FE35BG81
3131-268	6"	20	460	16CF35BH4
3131-269	6"	25	200/208	16GE35BD81
3131-267	6"	25	230	16FE35BG81
3131-268	6"	25	460	16CF35BH4
3131-270	6"	30	200/208	16HF35BD81
3131-271	6"	30	230	16HF35BG81
3131-272	6"	30	460	16EF35BH4
3131-273	6"	40	460	16FE35BH81
3131-274	6"	50	460	16GE35BH81
3131-275	6"	60	460	16HF35BH81
3131-272	8"	40	460	16EF35BH4
3131-273	8"	50	460	16FE35BH81
3131-274	8"	60	460	16GE35BH81
3131-275	8"	75	460	16HF35BH81
3131-276	8"	100	460	16IF35BH81

Heaters must be purchased separately.

FURNAS INNOVA 45



Heaters

Overload protection for three phase sub. motors. If motor is stalled, overload protector must trip within approx. 10 seconds to protect motor windings. Each installation requires three heaters.

A.Y. McDONALD MODEL NO.	HP	VOLTS	MODEL
3131-260	1/2 HP	230V	K-28
3131-241	3/4 HP	460V	K-23
3131-245	1 HP	230V	K-36
3131-242	1 HP	460V	K-26
3131-222	1 1/2 HP	230V	K-41
3131-243	1 1/2 HP	460V	K-29
3131-215	2 HP	230V	K-49
3131-244	2 HP	460V	K-33
3131-216	3 HP	200V	K-55
3131-224	3 HP	230V	K-52
3131-246	3 HP	460V	K-37
3131-258	5 HP	200V	K-62
3131-217	5 HP	230V	K-61
3131-215	5 HP	460V	K-49
3131-254	7 1/2 HP	200V	K-68
3131-230	7 1/2 HP	230V	K-67
3131-216	7 1/2 HP	460V	K-55
3131-217	10 HP	460V	K-61

Pressure Switches

"FSG" Pressure switches are rated to 1.5 HP 115 V 1 phase and/or 2 HP 230 V 1 phase or up to 3 HP 230V 3 phase. Submersible pumps above 2 HP 1 phase require deluxe control boxes with these switches.



A.Y. McDONALD MODEL NO.	SIZE	SETTING	SQUARE D MODEL
3129-421	1/4"	20-40	(9013FSG2J20)
3129-423	1/4"	30-50	(9013FSG2J21)
3129-432	1/4"	40-60	(9013FSG2J24)
3129-442	1/4"	20-40	(9013FSG2J20C20) 20 pack
3129-443	1/4"	30-50	(9013FSG2J21C20) 20 pack
3129-448	1/4"	40-60	(9013FSG2J24C20) 20 pack

Switches with "P" include pulsation plug to dampen surges to the switch

3129-414	1/4"	20-40	(9013FSG2J20P)
3129-436	1/4"	30-50	(9013FSG2J21P)



Switches with "M4" include auto cut-off if pressure drops to about 10 PSIG below cut-in pressure - requires manual reset with lever provided.

3129-420	1/4"	20-40	(9013FSG2J20M4)
3129-433	1/4"	30-50	(9013FSG2J21M4)
3129-438	1/4"	40-60	(9013FAG2J24M4)

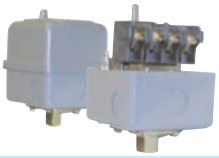
Switches with "M1" include manual cut-off lever to allow circuit interruption at the switch to service the pump.

3129-439	1/4"	30-50	(9013FSG2J21M1)

A.Y. McDONALD MODEL NO.	SIZE	SETTING	SQUARE D MODEL

"GSG" heavier duty switches are rated to 3 HP 230 V. 1 phase and 5 HP 230 V. 3 phase plus DC to 1 HP. They require use of deluxe control boxes on submersible pumps above 3 HP 1 phase.

3129-430	1/4"	20-40	(9013GSG2J20)
3129-435	1/4"	30-50	(9013GSG2J21)
3129-434	1/4"	40-60	(9013GSG2J24)



A.Y. McDONALD MODEL NO.	SIZE	SETTING
3129-450	1/4"	20-40
3129-451	1/4"	30-50
3129-452	1/4"	40-60



ACCESSORIES