

# spirax sarco®

## Control Panels 550 Series and 700 Series

### AVAILABLE TYPES

#### Series 550

Enclosure: Nema Type 1 ONLY

Controls: 2 starters with 3rd leg overload protection  
Reset button in cover

#### Series 700

Enclosure: Nema Type 1.

Controls: 2, 3 or 4 starters, each with 3rd leg overload protection and  
reset button on starters.  
Numbered terminal strip

### OPTIONAL EXTRAS

#### Series 550

Controls: 3 Position Selector Switch Hand-Off-Auto or Lead-Off Lag, or  
Test-Off-Auto  
Pilot Light(s) Red or Green  
230 V Max. Use 700 Series if voltage exceeds 230 V.

#### Series 700

Enclosure: Nema 1, 2, 3, 4X or 12. NEMA 7 or 9 Explosion Proof, consult factory.

Controls: 1 Disconnect per panel with Cover Interlock with provisions for padlock

1-Fuse Block per starter or—

1-Circuit Breaker per starter

Fused Control Circuit Transformer, 110 Volt Secondary.

1-Electric Alternator per panel (duplex models only)

Relays— as required.

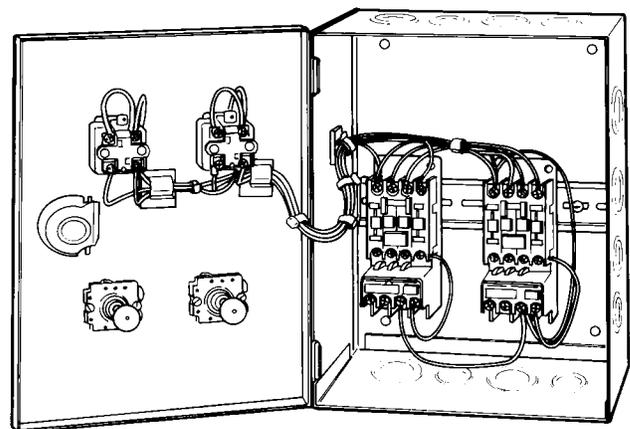
Selector Switches on cover, 1 per starter labeled:

- Hand-Off-Auto
- Lead-Off-Lag
- Boiler No. 1-Off-Boiler No. 2
- Pump No. 1-Off-Pump No. 2
- Test-Off-Auto (spring loaded to off)

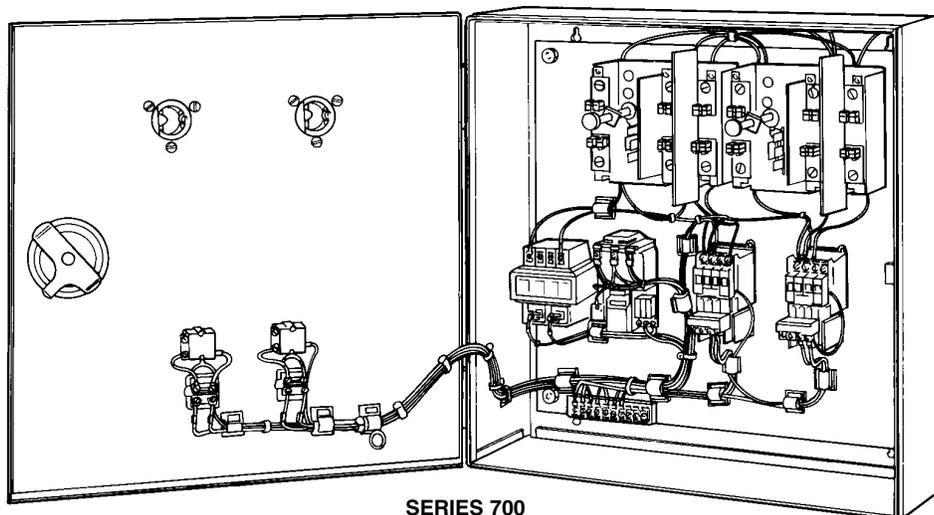
Pilot Lights on cover - 1 per starter

(Green for standard pumps; red for stand by pumps.)

Alarm bell with silencing switch - 1 per panel



SERIES 550



SERIES 700

TI-5-325-US 04.95

# Control Panels

## 550 Series and 700 Series

### NEMA ENCLOSURES

Enclosures For Inside Non-Hazardous Locations

Provides Protection Against	Type of Enclosure			
	1	2*	4*	12*
Accidental contact with enclosed equipment	yes	yes	yes	yes
Falling dirt	yes	yes	yes	yes
Falling liquids and light splashing		yes	yes	yes
Dust lint fibers and flyings			yes	yes
Hosedown and splashing water			yes	
Oil and coolant seepage			yes	yes
Oil and coolant spraying and splashing				
Corrosive agents				
Occasional submersion				

*\*These enclosures may be ventilated. However Type 1 may not provide protection against small particles of falling dirt when ventilation is provided in the enclosure top; and Type 12, if ventilated, will not be dust-tight*

### TYPE 1 - GENERAL PURPOSE INDOOR

Nonventilated Enclosures

**Type 1** enclosures are intended for use indoors primarily to prevent accidental contact of personnel with the enclosed equipment in areas where unusual service conditions do not exist. In addition, they provide protection against falling dirt. Enclosures which are intended to be flush mounted in building walls shall have provision to align the device with the flush plate and to compensate for the thickness of the wall.

**Type 2** enclosures are intended for use indoors to protect the enclosed equipment against falling non-corrosive liquids and falling dirt. They shall have provision for drainage. If provision is made for the entrance of conduit at the top, it shall consist of a conduit hub or the equivalent. When completely and properly installed, these enclosures shall prevent entrance of dripping liquid at a higher level than the lowest live part within the enclosure.

**Type 12** enclosures are intended for use indoors to protect the enclosed equipment against fibers, flyings, lint, dust and dirt and light splashing, seepage, dripping and external condensation of non corrosive liquids. There shall be no holes through the enclosure and no conduit knockouts or conduit openings, except that oiltight and dust-tight mechanisms may be mounted through holes in the enclosure when provided with oil-resistant gaskets. Doors shall be provided with oil-resistant gaskets. In addition, enclosures for combination controllers shall have hinged doors which swing horizontally and require a tool to open.

### TYPE 4X WATERTIGHT & DUSTTIGHT INDOOR & OUTDOOR

**Type 4X** corrosion resistant enclosures are intended for use indoors or outdoors to protect the enclosed equipment against splashing water, seepage of water, falling or hose-directed water, and severe external condensation. They are sleet-resistant but not sleet-(ice) proof. They shall have conduit hubs or equivalent provision for watertight connection at the conduit entrance and mounting means external to the equipment cavity.

### ENCLOSURES FOR HAZARDOUS LOCATIONS- GENERAL

The term "explosion proof" has been so loosely applied that NEMA deprecates its use. As defined by the "National Electrical Code," the term "explosion proof" applies only to Type 7 and 10 enclosures which, when properly installed and maintained, are designed to contain an internal explosion without causing external hazard. The term should not be applied to Type 8 enclosures which are designed to prevent an explosion through the use of oil-immersed equipment or to Type 9 enclosures which are designed to prevent an explosion by excluding explosive amounts of hazardous dust.

### EXPLOSION PROOF - NONVENTILATED ENCLOSURES

**Type 7** enclosures are intended for use indoors in the atmosphere and locations defined as Class I and Group A, B, C or D in the "National Electrical Code." The letter or letters A, B, C or D which indicate the gas or vapor atmospheres in the hazardous location shall appear as a suffix to the designation "Type 7" to give the complete NEMA designation and correspond to Class I, Group A, B, C or D, respectively, as defined in the "National Electrical Code." These enclosures shall be designed in accordance with the requirements of Underwriters Laboratories, Inc, "Industrial Control Equipment for Use in Hazardous Locations," UL 698, and shall be marked to show the Class and Group letter designations.

**Type 9** enclosures are intended for use indoors in the atmospheres defined as Class II and Group E, F or G in the "National Electrical Code." The letter or letters E, F or G which indicate the dust atmospheres in the hazardous location shall appear as a suffix to the designation "Type 9" to give the complete NEMA designation and correspond to Class II, Group E, F or G, respectively, as defined in the "National Electrical Code." These enclosures shall prevent the ingress of explosive amounts of hazardous dust. If gaskets are used, they shall be mechanically attached and of a noncombustible, nondeteriorating, vermin-proof material.