

Pump Control Products, Packages and Systems

for *industrial, agricultural & municipal* applications



- Standard full voltage pump panels
- Configurable full voltage pump panels
- Simplex, duplex, triplex control panels
- Full and reduced voltage starters
- AC drives from 1 to 700HP
- Wash down drives and NEMA 4X panels
- Custom controls and packaging
- Integrated pump control systems
- 24/7 service and support





Prepackaged Pump Control Starters

CBPP SERIES - COMBINATION CIRCUIT BREAKER / FULL VOLTAGE NON-REVERSING

NEMA SIZE 00-7 / NEMA 3R ENCLOSED
(WITH ELECTRONIC OVERLOAD PROTECTION)



CBPP Series Product Highlights:

CBPP series prepackaged pump control panels from Benshaw are UL listed and are available as NEMA HP rated. The NEMA 3R enclosure design makes CBPP panels ideal for a wide range of heavy duty pumping and irrigation applications.

All prepackaged panels are service entrance "SUSE" rated and backed by Benshaw's 2-year factory warranty.

For heavy duty performance, low cost, configurability and plug-and-play convenience, Benshaw's prepacked pump panels offer an exceptional value.

Rugged. Reliable. Ready.

Guaranteed ... for two full years.

Only Benshaw has a two year guarantee.

Benshaw pump controls are guaranteed for two full years. Other manufacturers limit their warranties to just one year. But at Benshaw, we believe that, because we build them better, we can guarantee them longer. We call that "the Benshaw Promise."



Provided with SPE Electronic Overload Relay

SPE electronic overload relays provide field adjustable, precise motor protection, including:

- ◆ Adjustable overload class (1-30)
- ◆ Wide range of current adjustments
- ◆ 1 NO and 1 NC auxiliary contact
- ◆ Current imbalance detection
- ◆ Phase loss detection
- ◆ Phase reversal protection
- ◆ Trip free design
- ◆ Test function/trip indication
- ◆ Fault indication



SPE Electronic Overload Relay

Standard Features:

- ◆ NEMA rated contactors
- ◆ NEMA 3R oversized enclosure
- ◆ Thermal magnetic circuit breaker
- ◆ SPE electronic overload
- ◆ H-O-A selector switch
- ◆ Start push button
- ◆ Reset push button
- ◆ UL listed "Service Entrance Rated"
- ◆ 120V control power transformer "fused"

Note: 240V units are built to order. Please allow two weeks for shipment.



Prepackaged Pump Control Starters

FDPP SERIES - COMBINATION FUSIBLE DISCONNECT / FULL VOLTAGE NON-REVERSING

NEMA SIZE 00-7 / NEMA 3R ENCLOSED
(WITH ELECTRONIC OVERLOAD PROTECTION)



Web stocked
up to
NEMA size 5
480V

Provided with SPE Electronic Overload Relay

SPE electronic overload relays provide field adjustable, precise motor protection, including:

- ◆ Adjustable overload class (1-30)
- ◆ Wide range of current adjustments
- ◆ 1 NO and 1 NC auxiliary contact
- ◆ Current imbalance detection
- ◆ Phase loss detection
- ◆ Phase reversal protection
- ◆ Trip free design
- ◆ Test function/trip indication
- ◆ Fault indication



SPE
Electronic
Overload
Relay

FDPP Series Product Highlights:

FDPP Series starters are NEMA rated and UL listed. All include Benschaw's exclusive, field adjustable SPE electronic overload relay as standard equipment, providing users with a completely integrated full voltage pump control panel.

FDPP Series pump controls offer plug-and-play convenience in an oversized, NEMA 3R enclosure ... ideal for the rigors of industrial pumping and irrigation applications.

Rugged. Reliable. Ready.

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Standard Features:

- ◆ NEMA rated contactors
- ◆ NEMA 3R oversized enclosure
- ◆ Fusible disconnect switch
- ◆ SPE electronic overload
- ◆ H-O-A selector switch
- ◆ Start push button
- ◆ Reset push button
- ◆ UL listed "Service Entrance Rated"
- ◆ 120V control power transformer "fused"

Note: 240V units are built to order. Please allow two weeks for shipment.



Prepackaged Pump Control Starters

RMSP SERIES - COMBINATION RMSP DISCONNECT / NEMA 3R ENCLOSED
IEC RATED



Standard Features:

- ◆ RMSP motor circuit protector disconnect switch
- ◆ IEC rated RC series contactors
- ◆ NEMA 3R oversized enclosure
- ◆ Rotary door operator, class 10 overload protection
- ◆ H-O-A selector switch
- ◆ Start push button
- ◆ Reset on rotary operator
- ◆ UL listed
- ◆ 120V control power transformer "fused"
- ◆ High interrupt capacity
- ◆ Oversized NEMA 3R enclosure
- ◆ Lockable disconnect
- ◆ Class 10 overload protection
- ◆ Phase loss protection

RMSP Series Product Highlights:

Benshaw's RMSP starters are IEC, AC3 rated, UL listed, completely integrated full voltage pump panels. The rugged NEMA 3R design is ideal for industrial pumping and irrigation applications.

All RMSPP series pump panels include Benshaw's field adjustable RMSP motor circuit protector for a complete, plug-and-play starter for your pump application.

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Modular Prepackaged Pump Controls Starters

FMPP and CMPP SERIES COMBINATION FULL VOLTAGE STARTERS WITH PLUG & PLAY OPTIONS

NEMA SIZE 00 - 7/NEMA 3R ENCLOSED
(WITH ELECTRONIC OVERLOAD PROTECTION)



Standard Product Features

- ◆ 230/460 Volt, Three phase (Derate for 208V)
- ◆ Heavy Duty Fusible Switch or Circuit Breaker (Low profile)*
- ◆ Flange Operated Disconnect
- ◆ Adjustable Motor Overload and Pump Protection (Class 10 or 20)
- ◆ HOA Switch (Side Mounted)
- ◆ Outdoor Rated NEMA 3R Enclosures
- ◆ Removable Accessory Panel
- ◆ “Plug and Play” Upgrade capability
- ◆ Defeatable Disconnect
- ◆ UL Listed Panel
- ◆ Ground Lug
- ◆ Control Power Transformer

Modular Options

- ◆ Pre-wired Motor and Pump Protection relay
- ◆ Power Surge Lightning Protection
- ◆ Pre-wired Time Clock (24hr)
- ◆ Pre-wired Control Transformer (120V)
- ◆ Electronic Overload Phase Protection Relay
- ◆ Pre-wired Panel Heater
- ◆ Disconnect Switch Interlock
- ◆ Circuit Breaker Shunt Trip
- ◆ High Interrupt
- ◆ Back Spin Protection
- ◆ Surge Protector 120V coil
- ◆ Blown Fuse Indicator Light
- ◆ Elapsed Time Meter
- ◆ Power, Run & Fault Indicator Lights
- ◆ Extra Capacity CPT 100 or 150va

***NOTE: Fuse not provided. Recommend Class R Type, dual element delay.**

**** Above 200 amps - rotary operator provided**

Engineered Pump Control Panels

EPP SERIES

Features

- ◆ Simplex, Duplex, Triplex
- ◆ NEMA 1 - NEMA 4XSS
- ◆ 2-year limited warranty
- ◆ 208 - 480VAC
- ◆ 5 - 60HP, 208 - 230VAC
- ◆ 10 - 125HP, 480VAC

Standard Specifications

- ◆ NEMA 1 enclosure
- ◆ IEC rated starter/electronic overload (Simplex only)
- ◆ Disconnect switch
- ◆ Hand-OFF-Auto selector switch
- ◆ "Pump ON" pilot light
- ◆ Alarm light
- ◆ Horn
- ◆ Alarm silence pushbutton
- ◆ Alternation (Duplex and Triplex)

Options Available

- ◆ NEMA 12, 3R, 4, 4X stainless steel enclosures
- ◆ Deadfront enclosure
- ◆ Automatic enclosure temperature control
- ◆ Autodialer
- ◆ 24VAC float power circuit
- ◆ Float level power circuit
- ◆ Float level pilot lights
- ◆ Elapsed time meter
- ◆ Power on light
- ◆ Voltage/phase monitor relay
- ◆ Variable speed control
- ◆ Lead lag (Duplex and Triplex)
- ◆ Solid state control



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Engineered Packages & Systems

PRODUCT OVERVIEW

Benshaw is the recognized industry leader in quick shipment of engineered drives with a state-of-the-art factory, dedicated engineering teams, and a complete inventory of the components necessary to build any engineered solution you require. Select the enclosure, pilot devices control strategy, and magnetics required to meet your most demanding application.

Control Modifications - Whatever You Specify

- ◆ Over 250 modifications and accessories are available, including: pilot devices, PLC's, control power transformers, switches, meters, relays, space heaters, and protective devices.

Combination Drive Packages to Meet Your Requirements

- ◆ 15 to 2000 amp circuit breakers
- ◆ 40 to 2000 amp non-fused disconnects
- ◆ 30 to 800 amp fusible disconnect
- ◆ Flange or rotary handle mechanism

Bypass Packages

- ◆ Two contactor
- ◆ Three contactor
- ◆ Reduced voltage solid state starters

Enclosures to Match Your Environment

- ◆ Standard designs - NEMA 1, 12, 3R
- ◆ Custom enclosures
- ◆ Special enclosures - 4, 4X, air conditioned
- ◆ Motor control centers

Filters for Your Unique Application

- ◆ Line reactors 3% and 5%
- ◆ Long lead filters
- ◆ Active and passive harmonic filters
- ◆ 18 pulse systems



World-class after-market service and support—whenever and wherever needed...

7x24

Benshaw provides comprehensive support, with web-based tools and dedicated, knowledgeable staff available 7-days-a-week, 24-hours-a-day to answer your questions, dispatch a field service technician or coordinate an emergency parts request.

Repairs, spares, field engineering, retrofits and training services—whenever and wherever needed—are all part of Benshaw's commitment.



www.BenshawExpress.com offers a guaranteed two-hour emergency response on many starters and drives from warehouses around the country

- ◆ 7x24 same day shipment.
- ◆ Air or truck delivery.
- ◆ Airport pick-up or door-to-door service.



7x24 Phone Support from Benshaw operations centers in Pittsburgh, Listowel (Canada), Detroit and Phoenix provides:

- ◆ Technical assistance.
- ◆ Overnight parts shipment.
- ◆ Service dispatch.



Training courses are available in a classroom or a hands-on environment:

- ◆ Basic electrical maintenance.
- ◆ Electronic maintenance and diagnostics.
- ◆ New product orientations.
- ◆ Customized systems (maintenance- or operations-based).



Regional/International Field Service by a skilled technician, engineer or complete team, if needed, is available for:

- ◆ Start-up commissioning.
- ◆ Field repairs.
- ◆ Field analysis/data collection.
- ◆ Preventive maintenance.



Repairs are made by trained, experienced personnel, using the latest diagnostic and test equipment to service:

- ◆ Printed circuit boards.
- ◆ Power electronic control assemblies.
- ◆ Electrical sub-assemblies.

United States

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