



**BENSHAW**  
Applied Motor Controls

# Aggregate SafeStart™ Low Voltage Soft Starter



## HEAVY DUTY PREPACKAGED SOFT STARTER WITH ATL BYPASS

*When Heavy Duty and Reliability is needed for your Pumps, Fans, Conveyor, Crusher, Compressor or other critical process applications. Benshaw's Aggregate SafeStart™ starter design gives you that safety and security.*

*Rapid | Rugged | Global*



## SafeStart™ | Low Voltage Solid State Starter

### ***Benshaw's SafeStart™ Series sets new industry standard for low voltage soft start safety and performance.***

SafeStart™ Series starters provide the same rugged reliability you've come to expect from Benshaw ... solid state reduced voltage starting for normal operation and full voltage emergency backup starting (with complete electronic motor protection) at the flip of a switch.

The starter's unique redundant design is ideal for critical applications where downtime is extremely disruptive to production operations and cannot be tolerated.

Plus, you gain peace of mind knowing you'll never need to access the high-voltage section to check parameters, control logic or status again.

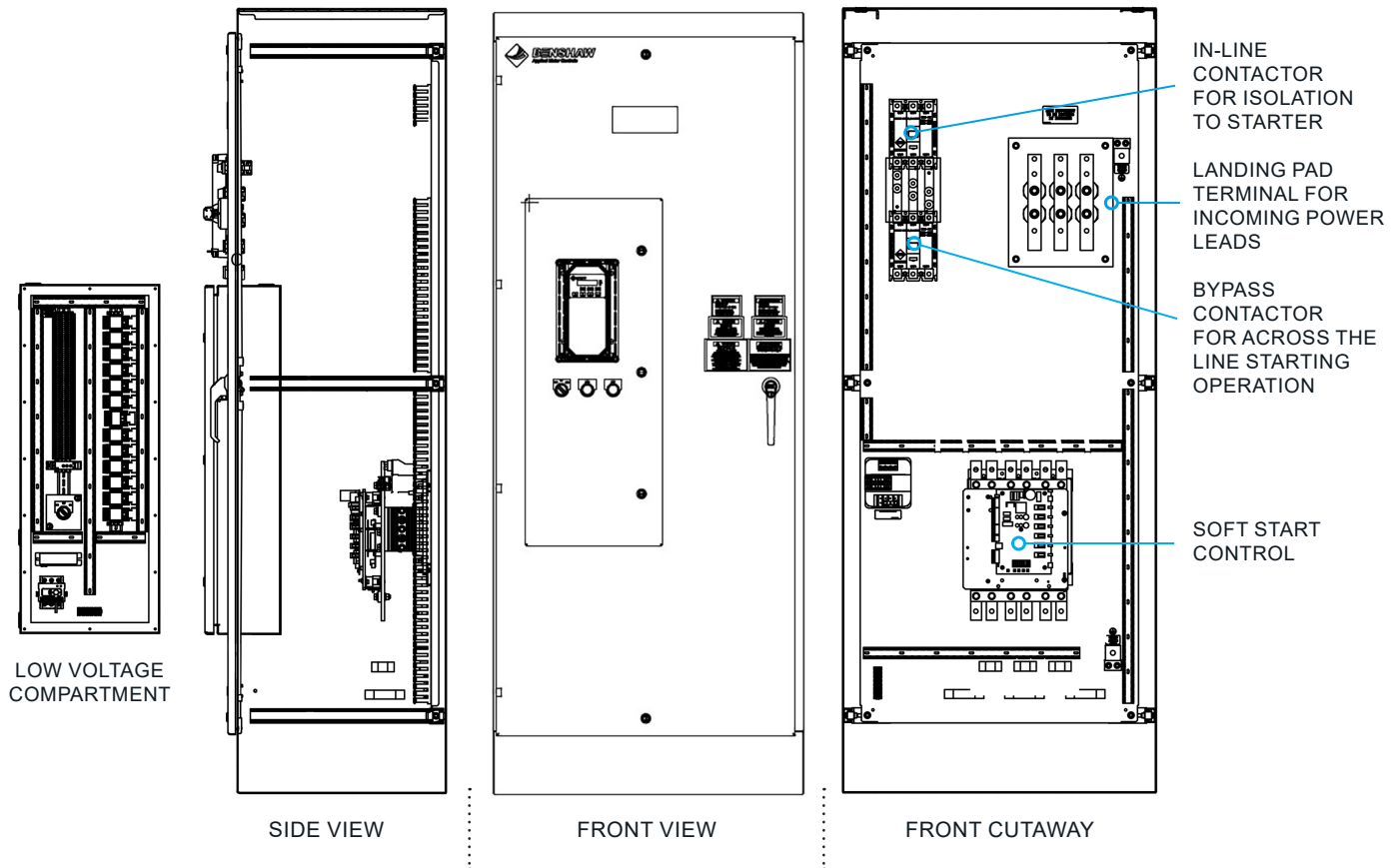


## KEY FEATURES

- 65KAIC rated
- Padlockable NEMA 12 enclosure (3R option)
- Isolation section: controls housed in isolated LV door mounted bucket. Provides safe access to 120VAC controls without entering the power section of the starter
- 500% — 30 seconds rated solid state starter
- 1800 PIV rated SCRs
- 125% continuous duty rated solid state starter
- Benshaw inline contactor
- Full HP rated bypass contactor with a 1.15 service factor. Wired for normal bypass operation and full voltage start and run operation
- Selector switch for choosing soft start or full voltage operation (mounted inside the enclosure)
- “SPD” Series overload relay wired for full voltage start and run protection
- Control power transformer with primary and secondary fuses
- Ground fault protection
- Door-mounted start and stop push-buttons
- Door mounted digital ammeter (utilizing SPD Series interface for display)
- Door-mounted keypad
- High fault circuit breaker with flange style operator (optional)
- UL certified and listed

## AGGREGATE SAFESTART™ SOFT STARTER

100HP, 480V NON-COMBO UNIT SHOWN



***A low voltage compartment separates all 120 volt controls from high voltage wiring and components.***

- Door-mounted run indicating light
- Door-mounted local-off remote switch
- Door-mounted overload reset
- Terminal strip mounted inside enclosure for remote start/stop connection
- Auxiliary relay with (2) Form C run contacts
- Benschaw MX3 programmable motor controller with soft start, soft stop and motor protection
- RS485 ModBus communications
- Analog I/O



## CUSTOMIZE YOUR SAFESTART™ STARTER

OPTION	DESCRIPTION
A.	Conveyor/Pump/Fan Spec Additions
B.	Cone Crusher Spec Additions
C.	Jaw Crusher Spec Additions
D.	Dual Motor Starting (will contain dual motor fuses and overload relays)
E.	Cone Crusher Adders (when specified)
F.	DC Injection Braking
G.	Reversing Motor Capabilities
H.	Circuit Breaker Disconnect

Quarry \_\_\_\_\_

Application \_\_\_\_\_

Horsepower \_\_\_\_\_

Voltage \_\_\_\_\_

FLA \_\_\_\_\_



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