

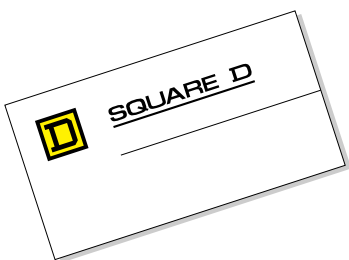
CLASS 5830  
REACTIVAR™ Power Factor Capacitors  
AV4000/AV5000 STANDARD AUTOMATIC BANKS

**The new Square D REACTIVAR AV4000 & AV5000 standard Automatic Power Factor Correction banks offer unsurpassed safety, ease of operation and performance.**

- Modular construction; free standing "MCC style" enclosures up to 350 kVAR per section facilitate future expansion.
- Standard offering available up to 1900kVAR, 600V main lugs or main breaker.
- New dry capacitor element design provides no risk of fluid leakage, no environmental pollution and no need for drip pans.
- Patented HQ protection system in each capacitor element employs an internal, non-replaceable 100kA fuse to safely remove the element from service at end of life.
- Blown fuse indicators are standard.
- Finger-safe dead-front fuse holders, power and control wiring for added safety.
- Capacitor rated contactors are designed specifically for the switching of capacitive currents.
- Patented capacitor pre-charge circuit reduces switching transients, negating the need for air-core reactors.
- State-of-the-art microprocessor controller offers automatic C/K ratio selection, CT polarity retrieval, phase rotation retrieval and more.
- LCD display on controller displays actual PF, alarms, number of steps energized and much more.
- Available in Type 1/12 indoor and 3R outdoor enclosure types.
- Controls are viewable through a safety window.
- Attractive finish: Units are constructed with removable steel panels over a welded steel frame. Indoor units are finished in a medium-blue textured paint finish. ASA 49 and 61 available upon request. Outdoor units are painted ASA 61 as standard.
- Split core control CT included as standard (please state size at time of entering order).
- Built to CSA and UL Standards.



The AV4000 and AV5000 standard Automatic Power Factor Correction banks are ideally suited for centralized power factor correction in applications where plant loading is constantly changing, resulting in the need for varying amounts of reactive power. An advanced microprocessor-based reactive power controller measures plant power factor via a single remote CT (included), and switches capacitor modules in and out of service to maintain a user-selected target power factor.



  
GROUPE SCHNEIDER

# Safety, Reliability and Ease of Operation

## A body of evidence to support the best:

The new Square D REACTIVAR AV4000 and AV5000 automatic capacitor systems draw on Groupe Schneider's world-wide expertise in capacitor technology:

- The new Square D Varlogic power factor controller is designed to offer unsurpassed functionality, reliability and simplicity of use.
- Merlin Gerin Varplus M capacitors offer proven reliability and unsurpassed safety.
- Telemecanique LC1D.K contactors are specifically designed for the purpose of capacitor switching.
- Finished units are constructed with finger-safe terminals, all copper bus, power and control wiring, field modularity and an attractive, ergonomic design.

In addition to superior quality, reliability and ease of operation, we offer a commitment to customer service, application engineering and after sales support. In fewer words, we offer the quality and support that you've come to expect from Square D.

## Advanced controller offers user-friendly interface:

With its ergonomic design, the new Square D Varlogic power factor controller offers sophisticated electronic interface to facilitate ease of set-up, installation and control.



## New advanced features make commissioning and operation simple:

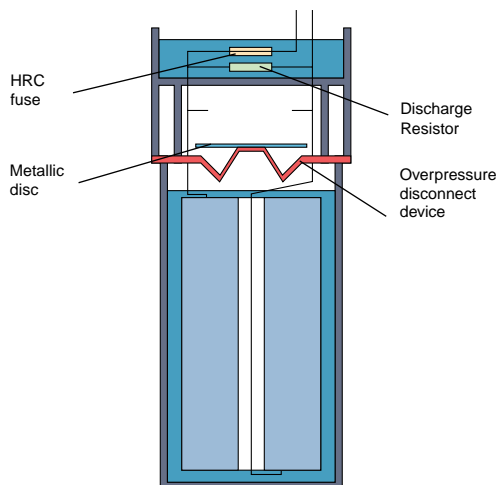
- Automatic C/K ratio selection.
- Automatic CT polarity retrieval.
- Automatic phase rotation polarity detection.
- Manual operation with automatic return.
- Automatic no-voltage release and automatic staged reconnection
- Alarm relay and indication for: low power factor, hunting, abnormal PF, leading PF, frequency not detected, overcurrent, overvoltage, overtemperature, excessive voltage THD, capacitor overload and loss of capacitance.
- Integral alphanumeric LCD display with graphical symbols includes display of: power factor, steps energized, step reconnection delay, real and reactive currents, voltage THD, alarm codes and more.



## Heavy duty performance and unsurpassed safety

Merlin Gerin Varplus M capacitors have a unique patented design that has been in service for over 10 years on several million elements around the world. Advances in materials and design provide reliability, safety and longevity unsurpassed in the industry:

- The HQ (High Quality) protection system provides protection against two types of end-of-life faults: High current faults are protected by an HRC cartridge fuse, low current faults are protected by a combination of the overpressure disconnect device and the HRC fuse.
- The self-healing metalized polypropylene film elements require no gas or liquid impregnation meaning they are completely environmentally safe.
- H Type cells used as standard are designed for the rigors of today's harmonic rich networks: Elements for 480V networks are rated 590V +10% overvoltage; Elements for 600 V networks are rated 690V +10% overvoltage.
- The unique cell design encapsulates the elements in a polyphenylene plastic housing mounted on a moulded polycarbonate plastic base. The plastic materials virtually eliminate the chances of ground faults originating from the cells. Furthermore, the design of the cells leads to better heat dissipation resulting in cooler operation and longer life.



## Modularity and Performance

### Task-specific Contactors:

Telemecanique LC1D.K contactors were designed specifically for the demands of capacitor switching. Standard NEMA or IEC contactors must be de-rated for capacitive switching. In addition to proven reliability, the LC1D.K contactor provides safety and durability for the entire bank:

- 100% rated for capacitor switching.
- A patented resistive pre-charge circuit operates from an auxiliary set of contacts to pre-charge the capacitor element just prior to main contact closure. This circuit reduces damaging switching transients more effectively than air core reactors. Reducing switching transients lessens the chance of disrupting sensitive equipment such as variable frequency drives. Furthermore, the reduced inrush current helps to extend the life of the capacitor elements.
- Extra NC auxiliary contact supplied as standard.

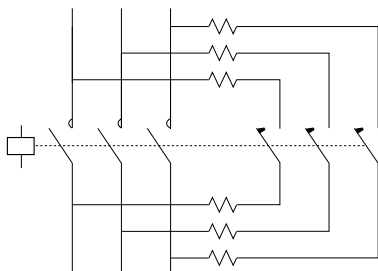
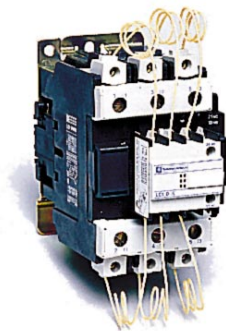


### Modular construction with safety in mind:

The Varlogic controller is flush mounted on a hinged plate which provides protection and access to a heavy duty control transformer with dual primary HRC fusing, single time-delay secondary fusing and a UL/CSA listed Class "A" resettable ground fault protection breaker.

Capacitor blocks are mounted on a modular plate and wired to HRC dead-front fuse holders and Telemecanique LC1D.K contactors. The entire assembly can be installed in minutes, facilitating cost effective future expansion. AV4000 units are constructed with up to 200 kVAR. AV5000 systems are constructed with up to 350 kVAR per "MCC style" section. For larger AV5000 systems, additional sections are added. Standard cubicle features includes:

- Finger-safe power and control wiring.
- Dead-front fuse holders with built-in blown fuse indicators, standard.
- All silver flashed copper bussing (AV5000) and all copper power and control wiring (AV4000 and AV5000).
- Lockable two-point flush-mount door latching.
- Cubicles are finished in an attractive medium blue textured polyester paint. The textured paint finish resists dents and scratches and the standard blue color sets the equipment apart (ASA 49 & 61 grey available). Outdoor units are painted ASA 61 as standard.



### The benefits are clear:

- Compact design means valuable space savings.
- Modular construction means easy expandability.
- Finger-safe terminals provide safety.
- Removable side panels offer ease of service and maintenance.
- Attractive finish sets the equipment apart.

# AV5000 Selection

| AV5000 Series◆ |              |                | Main Lugs or Main Breaker |        |                          |                | 240 Volt <sup>x</sup> 3 Phase/60Hz |                          |   | Type 1 Enclosure † |                                    |  |
|----------------|--------------|----------------|---------------------------|--------|--------------------------|----------------|------------------------------------|--------------------------|---|--------------------|------------------------------------|--|
| kVAR Rating■   | Steps        | kVAR per Step■ | Main Lugs                 |        | Standard Lugs Provided ■ | Main Breaker   |                                    | Standard Lugs Provided ■ | Recommended Minimum Size Protection Rating* @240V |                    | Recommended Minimum Cable Ampacity |  |
| 240V           | (Qty x kVAR) | kVAR           | Catalogue No.●            | Encl.▼ | (Qty x AWG)              | Catalogue No.● | Encl.▼                             | (Qty x AWG)              | Fuse  | Brkr/Trip          | 135% Rated Current (Amps)          |  |
| 50             | 2x25         | 25             | AV005025AV2N5N            | 2      | 2x1/0-2x350 MCM          | BV005025AV2N1N | 2                                  | 1x#4-1x250 MCM           | 200   | 250/200            | 163                                |  |
| 75             | 3x25         | 25             | AV007525AV2N5N            | 2      | 2x1/0-2x350 MCM          | BV007525AV2N4N | 2                                  | 3x2/0-3x300 MCM          | 300   | 400/300            | 245                                |  |
| 100            | 4x25         | 25             | AV010025AV2N5N            | 2      | 2x1/0-2x350 MCM          | BV010025AV2N4N | 2                                  | 3x2/0-3x300 MCM          | 400   | 400/400            | 326                                |  |
| 125            | 5x25         | 25             | AV012525AV2N5N            | 2      | 2x1/0-2x350 MCM          | BV012525AV2N4N | 2                                  | 3x2/0-3x300 MCM          | 500   | 800/500            | 407                                |  |
| 150            | 6x25         | 25             | AV015025AV2N5N            | 2      | 2x1/0-2x350 MCM          | BV015025AV2N5N | 3                                  | 2x1/0-2x350 MCM          | 600   | 800/600            | 489                                |  |
| 175            | 1x25,3x50    | 25             | AV017525CV2N6N            | 2      | 2x1/0-2x500 MCM          | BV017525CV2N6N | 3                                  | 2x1/0-2x500 MCM          | 700   | 800/700            | 570                                |  |
| 200            | 2x25,3x50    | 25             | AV020025BV2N7N            | 3      | 3x1/0-3x500 MCM          | BV020025BV2N6N | 3                                  | 2x1/0-2x500 MCM          | 800   | 800/800            | 651                                |  |
| 225            | 1x25,4x50    | 25             | AV022525CV2N7N            | 3      | 3x1/0-3x500 MCM          | BV022525CV2N6N | 3                                  | 2x1/0-2x500 MCM          | 900   | 1200/900           | 733                                |  |
| 250            | 5x50         | 50             | AV025025AV5N7N            | 3      | 3x1/0-3x500 MCM          | BV025025AV5N6N | 3                                  | 2x1/0-2x500 MCM          | 1000  | 1200/1000          | 814                                |  |
| 275            | 1x25,5x50    | 25             | AV027525CV2N7N            | 3      | 3x1/0-3x500 MCM          | BV027525CV2N7N | 3                                  | 3x1/0-3x500 MCM          | 1100  | 1200/1000          | 895                                |  |
| 300            | 6x50         | 50             | AV030025AV5N7N            | 3      | 3x1/0-3x500 MCM          | BV030025AV5N7N | 3                                  | 3x1/0-3x500 MCM          | 1200  | 1200/1200          | 977                                |  |

| AV5000 Series◆ |              |                | Main Lugs or Main Breaker |        |                          |                | 480 Volt <sup>x</sup> 3 Phase/60Hz |                          |   | Type 1 Enclosure † |                                    |  |
|----------------|--------------|----------------|---------------------------|--------|--------------------------|----------------|------------------------------------|--------------------------|---|--------------------|------------------------------------|--|
| kVAR Rating■   | Steps        | kVAR per Step■ | Main Lugs                 |        | Standard Lugs Provided ■ | Main Breaker   |                                    | Standard Lugs Provided ■ | Recommended Minimum Size Protection Rating* @480V |                    | Recommended Minimum Cable Ampacity |  |
| 480V           | (Qty x kVAR) | kVAR           | Catalogue No.●            | Encl.▼ | (Qty x AWG)              | Catalogue No.● | Encl.▼                             | (Qty x AWG)              | Fuse  | Brkr/Trip          | 135% Rated Current (Amps)          |  |
| 50             | 2x25         | 25             | AV005045AV2N5N            | 2      | 2x1/0-2x350 MCM          | BV005045AV2N1N | 2                                  | 1x#4-1x250 MCM           | 100   | 250/90             | 81                                 |  |
| 75             | 1x25,1x50    | 25             | AV007545CV2N5N            | 2      | 2x1/0-2x350 MCM          | BV007545CV2N1N | 2                                  | 1x#4-1x250 MCM           | 150   | 250/150            | 122                                |  |
| 100            | 2x25,1x50    | 25             | AV010045BV2N5N            | 2      | 2x1/0-2x350 MCM          | BV010045BV2N1N | 2                                  | 1x#4-1x250 MCM           | 200   | 250/200            | 162                                |  |
| 125            | 1x25,2x50    | 25             | AV012545CV2N5N            | 2      | 2x1/0-2x350 MCM          | BV012545CV2N1N | 2                                  | 1x#4-1x250 MCM           | 250   | 250/225            | 203                                |  |
| 150            | 3x50         | 50             | AV015045AV5N6N            | 2      | 2x1/0-2x500 MCM          | BV015045AV5N4N | 2                                  | 3x2/0-3x300 MCM          | 300   | 400/300            | 243                                |  |
| 175            | 1x25,3x50    | 25             | AV017545CV2N6N            | 2      | 2x1/0-2x500 MCM          | BV017545CV2N4N | 2                                  | 3x2/0-3x300 MCM          | 400   | 400/350            | 284                                |  |
| 200            | 4x50         | 50             | AV020045AV5N6N            | 2      | 2x1/0-2x500 MCM          | BV020045AV5N4N | 2                                  | 3x2/0-3x300 MCM          | 400   | 400/400            | 324                                |  |
| 225            | 1x25,4x50    | 25             | AV022545CV2N6N            | 2      | 2x1/0-2x500 MCM          | BV022545CV2N4N | 2                                  | 3x2/0-3x300 MCM          | 500   | 800/500            | 365                                |  |
| 250            | 5x50         | 50             | AV025045AV5N6N            | 2      | 2x1/0-2x500 MCM          | BV025045AV5N4N | 2                                  | 3x2/0-3x300 MCM          | 500   | 800/500            | 405                                |  |
| 275            | 1x25,5x50    | 25             | AV027545CV2N6N            | 2      | 2x1/0-2x500 MCM          | BV027545CV2N6N | 3                                  | 2x1/0-2x500 MCM          | 600   | 800/500            | 446                                |  |
| 300            | 6x50         | 50             | AV030045AV5N6N            | 2      | 2x1/0-2x500 MCM          | BV030045AV5N6N | 3                                  | 2x1/0-2x500 MCM          | 600   | 800/600            | 486                                |  |
| 350            | 1x50,3x100   | 50             | AV035045CV5N6N            | 2      | 2x1/0-2x500 MCM          | BV035045CV5N6N | 3                                  | 2x1/0-2x500 MCM          | 700   | 800/700            | 567                                |  |
| 400            | 2x50,3x100   | 50             | AV040045BV5N6N            | 3      | 2x1/0-2x500 MCM          | BV040045BV5N6N | 3                                  | 2x1/0-2x500 MCM          | 800   | 800/800            | 648                                |  |
| 450            | 1x50,4x100   | 50             | AV045045CV5N6N            | 3      | 2x1/0-2x500 MCM          | BV045045CV5N6N | 3                                  | 2x1/0-2x500 MCM          | 900   | 1200/900           | 729                                |  |
| 500            | 2x50,4x100   | 50             | AV050045BV5N7N            | 3      | 3x1/0-3x500 MCM          | BV050045BV5N7N | 3                                  | 3x1/0-3x500 MCM          | 1000  | 1200/900           | 810                                |  |
| 550            | 1x50,5x100   | 50             | AV055045CV5N7N            | 3      | 3x1/0-3x500 MCM          | BV055045CV5N7N | 3                                  | 3x1/0-3x500 MCM          | 1100  | 1200/1000          | 891                                |  |
| 600            | 6x100        | 100            | AV060045AV8N7N            | 3      | 3x1/0-3x500 MCM          | BV060045AV8N7N | 3                                  | 3x1/0-3x500 MCM          | 1200  | 1200/1200          | 972                                |  |

| AV5000 Series◆ |              |                | Main Lugs or Main Breaker |        |                          |                | 600 Volt <sup>x</sup> 3 Phase/60Hz |                          |   | Type 1 Enclosure † |                                    |  |
|----------------|--------------|----------------|---------------------------|--------|--------------------------|----------------|------------------------------------|--------------------------|---|--------------------|------------------------------------|--|
| kVAR Rating■   | Steps        | kVAR per Step■ | Main Lugs                 |        | Standard Lugs Provided ■ | Main Breaker   |                                    | Standard Lugs Provided ■ | Recommended Minimum Size Protection Rating* @600V |                    | Recommended Minimum Cable Ampacity |  |
| 600V           | (Qty x kVAR) | kVAR           | Catalogue No.●            | Encl.▼ | (Qty x AWG)              | Catalogue No.● | Encl.▼                             | (Qty x AWG)              | Fuse  | Brkr/Trip          | 135% Rated Current (Amps)          |  |
| 50             | 2x25         | 25             | AV005065AV2N5N            | 2      | 2x1/0-2x350 MCM          | BV005065AV2N1N | 2                                  | 1x#4-1x250 MCM           | 100   | 250/90             | 65                                 |  |
| 75             | 1x25,1x50    | 25             | AV007565CV2N5N            | 2      | 2x1/0-2x350 MCM          | BV007565CV2N1N | 2                                  | 1x#4-1x250 MCM           | 150   | 250/125            | 98                                 |  |
| 100            | 2x25,1x50    | 25             | AV010065BV2N5N            | 2      | 2x1/0-2x350 MCM          | BV010065BV2N1N | 2                                  | 1x#4-1x250 MCM           | 200   | 250/150            | 130                                |  |
| 125            | 1x25,2x50    | 25             | AV012565CV2N5N            | 2      | 2x1/0-2x350 MCM          | BV012565CV2N1N | 2                                  | 1x#4-1x250 MCM           | 200   | 250/200            | 163                                |  |
| 150            | 3x50         | 50             | AV015065AV5N6N            | 2      | 2x1/0-2x500 MCM          | BV015065AV5N4N | 2                                  | 3x2/0-3x300 MCM          | 250   | 400/225            | 195                                |  |
| 175            | 1x25,3x50    | 25             | AV017565CV2N6N            | 2      | 2x1/0-2x500 MCM          | BV017565CV2N4N | 2                                  | 3x2/0-3x300 MCM          | 300   | 400/300            | 228                                |  |
| 200            | 4x50         | 50             | AV020065AV5N6N            | 2      | 2x1/0-2x500 MCM          | BV020065AV5N4N | 2                                  | 3x2/0-3x300 MCM          | 400   | 400/300            | 260                                |  |
| 225            | 1x25,4x50    | 25             | AV022565CV2N6N            | 2      | 2x1/0-2x500 MCM          | BV022565CV2N4N | 2                                  | 3x2/0-3x300 MCM          | 400   | 400/350            | 293                                |  |
| 250            | 5x50         | 50             | AV025065AV5N6N            | 2      | 2x1/0-2x500 MCM          | BV025065AV5N4N | 2                                  | 3x2/0-3x300 MCM          | 400   | 400/400            | 325                                |  |
| 275            | 1x25,5x50    | 25             | AV027565CV2N6N            | 2      | 2x1/0-2x500 MCM          | BV027565CV2N6N | 3                                  | 2x1/0-2x500 MCM          | 500   | 400/400            | 358                                |  |
| 300            | 6x50         | 50             | AV030065AV5N6N            | 2      | 2x1/0-2x500 MCM          | BV030065AV5N6N | 3                                  | 2x1/0-2x500 MCM          | 500   | 800/500            | 390                                |  |
| 350            | 1x50,3x100   | 50             | AV035065CV5N6N            | 2      | 2x1/0-2x500 MCM          | BV035065CV5N6N | 3                                  | 2x1/0-2x500 MCM          | 600   | 800/600            | 455                                |  |
| 400            | 2x50,3x100   | 50             | AV040065BV5N6N            | 3      | 2x1/0-2x500 MCM          | BV040065BV5N6N | 3                                  | 2x1/0-2x500 MCM          | 700   | 800/600            | 520                                |  |
| 450            | 1x50,4x100   | 50             | AV045065CV5N6N            | 3      | 2x1/0-2x500 MCM          | BV045065CV5N6N | 3                                  | 2x1/0-2x500 MCM          | 800   | 800/700            | 585                                |  |
| 500            | 2x50,4x100   | 50             | AV050065BV5N7N            | 3      | 3x1/0-3x500 MCM          | BV050065BV5N7N | 3                                  | 3x1/0-3x500 MCM          | 800   | 800/800            | 650                                |  |
| 550            | 1x50,5x100   | 50             | AV055065CV5N7N            | 3      | 3x1/0-3x500 MCM          | BV055065CV5N7N | 3                                  | 3x1/0-3x500 MCM          | 900   | 800/800            | 715                                |  |
| 600            | 6x100        | 100            | AV060065AV8N7N            | 3      | 3x1/0-3x500 MCM          | BV060065AV8N7N | 3                                  | 3x1/0-3x500 MCM          | 1000  | 1200/900           | 780                                |  |

**X** For 208 Volt applications, the effective kVAR rating at 208 Volts is 0.75 times the kVAR rating at 240 Volts.  
**◆** A single remote Current Transformer (included) must be located on the bus/cable at the main service entrance terminal compartment. **CT included in price. Specify CT ratio at time of order.**  
**●** Top entry is standard. For bottom entry, consult your nearest Square D/Groupe Schneider sales office.  
**▼** For dimensions, see next page.  
**\*** Consult local Electrical Codes for proper sizing of Moulded Case Circuit Breakers and Disconnect Switches.  
**†** Type 3R and 12 enclosures available. Consult your nearest Square D/Groupe Schneider sales office.  
**■** For additional sizes, ratings or options, please consult your nearest Square D/Groupe Schneider sales office.

## Compact Design for Smaller Applications.

All the features but two-thirds the size of the AV5000, the AV4000 is ideal for smaller applications. The major difference between the AV4000 and AV5000 is expandability. For applications up to 200 kVAR (main lugs, Type 1 only), where expandability is not a factor, the AV4000 offers all the features of the AV5000 in a more compact, cost effective size.

| AV4000 Series |              | Main Lugs Only |                | 480 Volt 3 Phase/60Hz |                          | Type 1 Enclosure ◆                                 |           |                                    |
|---------------|--------------|----------------|----------------|-----------------------|--------------------------|--|-----------|------------------------------------|
| kVAR Rating■  | Steps        | kVAR per Step■ | Main Lugs      |                       | Standard Lugs Provided ■ | Recommended Minimum Size Protection Rating* @ 480V |           | Recommended Minimum Cable Ampacity |
| 480V          | (Qty x kVAR) | kVAR           | Catalogue No.● | Encl.▼                | (Qty x AWG)              | Fuse   | Brkr/Trip | 135% Rated Current (Amps)          |
| 50            | 2x25         | 25             | AV005044AV2NPN | 1                     | 2x#4-2x500 MCM           | 100  | 250/90    | 81                                 |
| 75            | 1x25,1x50    | 25             | AV007544CV2NPN | 1                     | 2x#4-2x500 MCM           | 150  | 250/150   | 122                                |
| 100           | 2x25,1x50    | 25             | AV010044BV2NPN | 1                     | 2x#4-2x500 MCM           | 200  | 250/200   | 162                                |
| 125           | 1x25,2x50    | 25             | AV012544CV2NPN | 1                     | 2x#4-2x500 MCM           | 250  | 250/225   | 203                                |
| 150           | 2x25,2x50    | 25             | AV015044BV2NPN | 1                     | 2x#4-2x500 MCM           | 300  | 400/300   | 243                                |
| 175           | 1x25,3x50    | 25             | AV017544CV2NPN | 1                     | 2x#4-2x500 MCM           | 400  | 400/350   | 284                                |
| 200           | 4x50         | 50             | AV020044AV5NPN | 1                     | 2x#4-2x500 MCM           | 400  | 400/400   | 324                                |

| AV4000 Series |              | Main Lugs Only |                | 600 Volt 3 Phase/60Hz |                          | Type 1 Enclosure ◆                                 |           |                                    |
|---------------|--------------|----------------|----------------|-----------------------|--------------------------|--|-----------|------------------------------------|
| kVAR Rating■  | Steps        | kVAR per Step■ | Main Lugs      |                       | Standard Lugs Provided ■ | Recommended Minimum Size Protection Rating* @ 600V |           | Recommended Minimum Cable Ampacity |
| 600V          | (Qty x kVAR) | kVAR           | Catalogue No.● | Encl.▼                | (Qty x AWG)              | Fuse   | Brkr/Trip | 135% Rated Current (Amps)          |
| 50            | 2x25         | 25             | AV005064AV2NPN | 1                     | 2x#4-2x500 MCM           | 100  | 250/90    | 65                                 |
| 75            | 1x25,1x50    | 25             | AV007564CV2NPN | 1                     | 2x#4-2x500 MCM           | 150  | 250/125   | 98                                 |
| 100           | 2x25,1x50    | 25             | AV010064BV2NPN | 1                     | 2x#4-2x500 MCM           | 200  | 250/150   | 130                                |
| 125           | 1x25,2x50    | 25             | AV012564CV2NPN | 1                     | 2x#4-2x500 MCM           | 200  | 250/200   | 163                                |
| 150           | 2x25,2x50    | 25             | AV015064BV2NPN | 1                     | 2x#4-2x500 MCM           | 250  | 400/225   | 195                                |
| 175           | 1x25,3x50    | 25             | AV017564CV2NPN | 1                     | 2x#4-2x500 MCM           | 300  | 400/300   | 228                                |
| 200           | 4x50         | 50             | AV020064AV5NPN | 1                     | 2x#4-2x500 MCM           | 400  | 400/300   | 260                                |

- ◆ A single remote Current Transformer (included) must be located on the bus/cable at the main service entrance terminal compartment. **CT included in price. Specify CT ratio at time of order.**
- Top entry is standard. For bottom entry, consult your nearest Square D/Groupe Schneider sales office.
- ▼ For dimensions, see below.
- \* Consult local Electrical Codes for proper sizing of Moulded Case Circuit Breakers and Disconnect Switches.
- For additional sizes, ratings or options, please consult your nearest Square D/Groupe Schneider sales office.

| Dimensions X |       |      |          |                        |      |
|--------------|-------|------|----------|------------------------|------|
| Type         | Encl. | Fig. | Sections | Dimensions "B" (width) |      |
|              |       |      |          | IN                     | (mm) |
| AV4000       | 1     | 1    | 1        | 23.5                   | 597  |
| AV5000       | 2     | 2    | 1        | 23.5                   | 597  |
|              | 3     | 2    | 2        | 47.0                   | 1194 |

X Dimensions are approximate only. Do not use for construction. For actual dimensions, contact your local Square D/Groupe Schneider sales office.

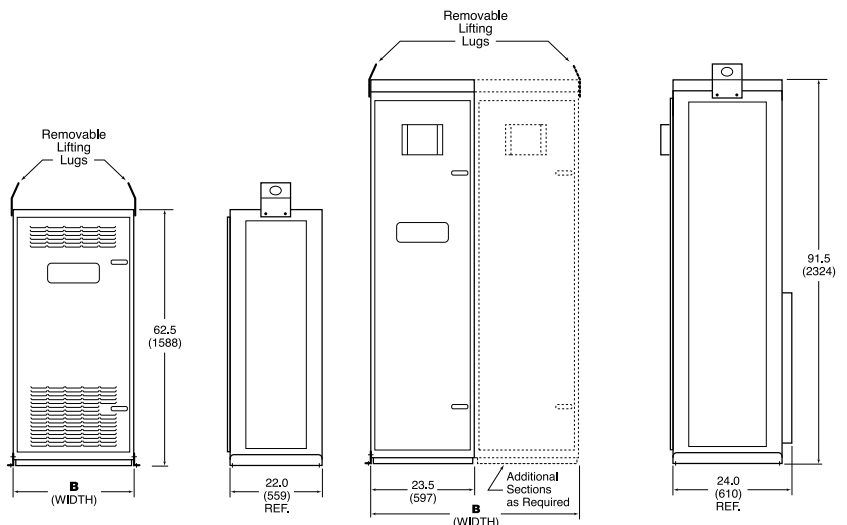
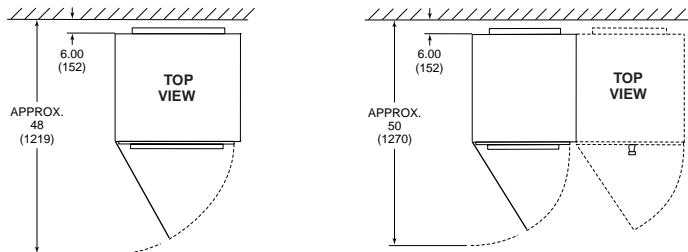


Fig. 1: AV4000 Dimensions

Fig. 2: AV5000 Dimensions

## Other products and services:

- REACTIVAR low voltage Fixed Capacitors
- AV6000 Anti-resonant bank for power factor correction in harmonic-rich environments.
- AV7000 Harmonic filters for removal of harmonics
- Active (electronic) filters
- AV8000 and AV9000 Real Time Reactive Compensation banks and filters for highly transient loads.
- Medium voltage fixed and automatic switched banks up to 37 kV
- Medium voltage Real Time Compensation Banks up to 15 kV
- Engineering services such as:
  - Size and rating assistance
  - Harmonic analysis
  - Computer simulations
  - Commissioning
  - Service contracts

**Consult your nearest Square D/Groupe Schneider sales office for pricing.**

## Application Note:

All capacitors are a low impedance path for harmonic currents produced by non-linear loads such as variable frequency drives, motor soft-starters, welders, computers, PLC's, robotics and other electronic equipment. These harmonic currents can be drawn into the capacitor bank causing it to overheat, shortening its life and possibly preventing proper operation. Furthermore, the resonant circuit formed by shunt capacitors coupled with system inductance's (transformers and motors) can magnify harmonic currents and voltages which can cause nuisance fuse operation and/or damage electrical equipment. Should your electrical system contain any non-linear loads, please contact Square D/Groupe Schneider for application assistance. For applications which require power factor correction in harmonic-rich environments, substitute the AV6000 Anti-resonant automatic capacitor bank. Consult Square D/Groupe Schneider for more information.

Specifications are subject to change without notice.

VISIT OUR WEBSITE AT [WWW.REACTIVAR.COM](http://WWW.REACTIVAR.COM)

## Schneider Electric

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## Available Options

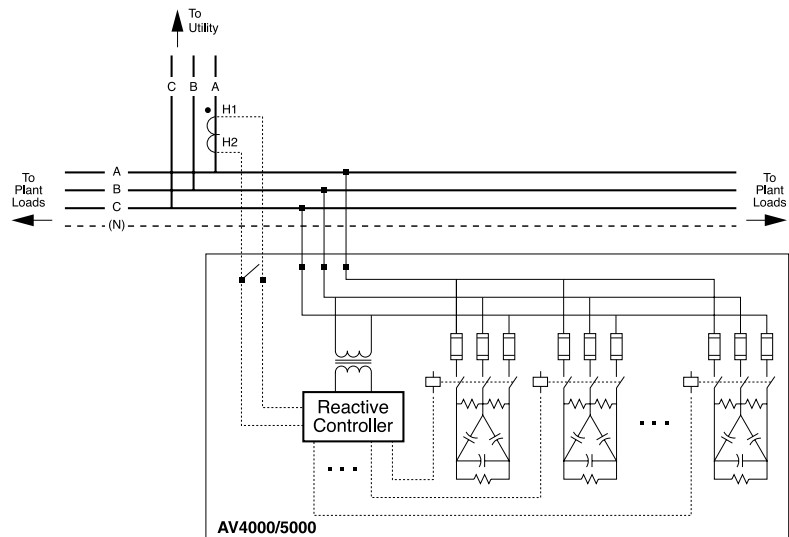
|  | AV4000 | AV5000 |
|--|--------|--------|
| Silver flashed copper bus                        | N/A    | ■      |
| Copper power and control wiring                  | ■      | ■      |
| Heavy duty capacitor elements                    | ■      | ■      |
| Heavy duty control transformer w/ Class A GFI    | ■      | ■      |
| Finger safe control & power wiring               | ■      | ■      |
| Advanced 12 step controller                      | ■      | ■      |
| C/W: Digital display incl. power factor meter    | ■      | ■      |
| Automatic commissioning incl. auto C/K selection | ■      | ■      |
| Comprehensive alarms                             | ■      | ■      |
| Blown fuse indicators                            | ■      | ■      |
| Capacitor soft precharge circuit                 | ■      | ■      |
| Main lugs  | ■      | ■      |
| Main breaker                                     | N/A    | ○      |
| Top entry  | ■      | ■      |
| Bottom or side entry                             | N/A    | ○      |
| Precaution blue paint                            | ■      | ■      |
| ASA 49 or 61 paint                               | ○      | ○      |
| Type 1 enclosure                                 | ■      | ■      |
| Type 12 & 3R enclosure                           | N/A    | ○      |
| Powerlogic circuit monitor                       | N/A    | ○      |
| Special control arrangements                     | N/A    | ○      |
| Other voltages or frequencies                    | N/A    | ○      |
| Other staging ratio's                            | ○      | ○      |
| Fixed stages                                     | ○      | ○      |

■ Standard feature

○ Available option

N/A Not available

## Wiring Diagram



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