

SIEMENS



3VA Enclosed Circuit Breaker Quick Reference

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125A TMTU Circuit Breaker Selection



| 125A, 3P \leq 25KAIC @ 480V | | | | |
|--|----------|----------|----------|--------------------|
| Amperage | ED43 | ED63 | NGG | 3VA51**4 |
| 15 | ED43B015 | ED63B015 | NGG3B015 | 3VA5195-4EC31-0AA0 |
| 20 | ED43B020 | ED63B020 | NGG3B020 | 3VA5120-4EC31-0AA0 |
| 25 | ED43B025 | ED63B025 | NGG3B025 | 3VA5125-4EC31-0AA0 |
| 30 | ED43B030 | ED63B030 | NGG3B030 | 3VA5130-4EC31-0AA0 |
| 35 | ED43B035 | ED63B035 | NGG3B035 | 3VA5135-4EC31-0AA0 |
| 40 | ED43B040 | ED63B040 | NGG3B040 | 3VA5140-4EC31-0AA0 |
| 45 | ED43B045 | ED63B045 | NGG3B045 | 3VA5145-4EC31-0AA0 |
| 50 | ED43B050 | ED63B050 | NGG3B050 | 3VA5150-4EC31-0AA0 |
| 60 | ED43B060 | ED63B060 | NGG3B060 | 3VA5160-4EC31-0AA0 |
| 70 | ED43B070 | ED63B070 | NGG3B070 | 3VA5170-4EC31-0AA0 |
| 80 | ED43B080 | ED63B080 | NGG3B080 | 3VA5180-4EC31-0AA0 |
| 90 | ED43B090 | ED63B090 | NGG3B090 | 3VA5190-4EC31-0AA0 |
| 100 | ED43B100 | ED63B100 | NGG3B100 | 3VA5110-4EC31-0AA0 |
| 110 | ED43B110 | ED63B110 | NGG3B110 | 3VA5111-4EC31-0AA0 |
| 125 | ED43B125 | ED63B125 | NGG3B125 | 3VA5112-4EC31-0AA0 |

| 125A, 3P 35KAIC @ 480V | | | |
|------------------------|----------|----------|--------------------|
| Amperage | NDG | HGG | 3VA51**5 |
| 15 | N/A | HGG3B015 | 3VA5195-5EC31-0AA0 |
| 20 | N/A | HGG3B020 | 3VA5120-5EC31-0AA0 |
| 25 | N/A | HGG3B025 | 3VA5125-5EC31-0AA0 |
| 30 | N/A | HGG3B030 | 3VA5130-5EC31-0AA0 |
| 35 | N/A | HGG3B035 | 3VA5135-5EC31-0AA0 |
| 40 | N/A | HGG3B040 | 3VA5140-5EC31-0AA0 |
| 45 | N/A | HGG3B045 | 3VA5145-5EC31-0AA0 |
| 50 | NDK3B050 | HGG3B050 | 3VA5150-5EC31-0AA0 |
| 60 | NDK3B060 | HGG3B060 | 3VA5160-5EC31-0AA0 |
| 70 | NDK3B070 | HGG3B070 | 3VA5170-5EC31-0AA0 |
| 80 | NDK3B080 | HGG3B080 | 3VA5180-5EC31-0AA0 |
| 90 | NDK3B090 | HGG3B090 | 3VA5190-5EC31-0AA0 |
| 100 | NDK3B100 | HGG3B100 | 3VA5110-5EC31-0AA0 |
| 110 | NDK3B110 | HGG3B110 | 3VA5111-5EC31-0AA0 |
| 125 | NDK3B125 | HGG3B125 | 3VA5112-5EC31-0AA0 |

| 125A, 3P \leq 65KAIC @ 480V | | | | | |
|--|----------|-----------|------------|----------|--------------------|
| Amperage | HDG | HED4 | HHED6 | LGG | 3VA51**6 |
| 15 | N/A | HED43B015 | HHED63B015 | LGG3B015 | 3VA5195-6EC31-0AA0 |
| 20 | N/A | HED43B020 | HHED63B020 | LGG3B020 | 3VA5120-6EC31-0AA0 |
| 25 | N/A | HED43B025 | HHED63B025 | LGG3B025 | 3VA5125-6EC31-0AA0 |
| 30 | N/A | HED43B030 | HHED63B030 | LGG3B030 | 3VA5130-6EC31-0AA0 |
| 35 | N/A | HED43B035 | HHED63B035 | LGG3B035 | 3VA5135-6EC31-0AA0 |
| 40 | N/A | HED43B040 | HHED63B040 | LGG3B040 | 3VA5140-6EC31-0AA0 |
| 45 | N/A | HED43B045 | HHED63B045 | LGG3B045 | 3VA5145-6EC31-0AA0 |
| 50 | HDK3B050 | HED43B050 | HHED63B050 | LGG3B050 | 3VA5150-6EC31-0AA0 |
| 60 | HDK3B060 | HED43B060 | N/A | LGG3B060 | 3VA5160-6EC31-0AA0 |
| 70 | HDK3B070 | HED43B070 | N/A | LGG3B070 | 3VA5170-6EC31-0AA0 |
| 80 | HDK3B080 | HED43B080 | N/A | LGG3B080 | 3VA5180-6EC31-0AA0 |
| 90 | HDK3B090 | HED43B090 | N/A | LGG3B090 | 3VA5190-6EC31-0AA0 |
| 100 | HDK3B100 | HED43B100 | N/A | LGG3B100 | 3VA5110-6EC31-0AA0 |
| 110 | HDK3B110 | HED43B110 | N/A | LGG3B110 | 3VA5111-6EC31-0AA0 |
| 125 | HDK3B125 | HED43B125 | N/A | LGG3B125 | 3VA5112-6EC31-0AA0 |

- 1.) Lugs are not included with 3VA circuit breakers, reference the table on next page for "standard" lug options.
- 2.) All 3VA circuit breakers are non-interchangeable trip units.
- 3.) In reference to 3VA, digits 9 and 10(-EC-) can be substituted for -ED-, this indicates non-adjustable instantaneous.
- 4.) Breakers cannot be installed in the enclosures at the factory.

250A TMTU Circuit Breaker Selection



400A TMTU Circuit Breaker Selection



250A, 3P 35KAIC @ 480V

| Amperage | FD6/FXD6 | NFG | 3VA52**5 |
|----------|----------|----------|--------------------|
| 100 | FD63B100 | NFK3B100 | 3VA5210-5EC31-0AA0 |
| 110 | FD63B110 | NFK3B110 | 3VA5211-5EC31-0AA0 |
| 125 | FD63B125 | NFK3B125 | 3VA5212-5EC31-0AA0 |
| 150 | FD63B150 | NFK3B150 | 3VA5215-5EC31-0AA0 |
| 175 | FD63B175 | NFK3B175 | 3VA5217-5EC31-0AA0 |
| 200 | FD63B200 | NFK3B200 | 3VA5220-5EC31-0AA0 |
| 225 | FD63B225 | NFK3B225 | 3VA5222-5EC31-0AA0 |
| 250 | FD63B250 | NFK3B250 | 3VA5225-5EC31-0AA0 |

400A, 3P 35KAIC @ 480V

| Amperage | JD6/JXD6 | NJG/NJX | 3VA53**5 |
|----------|--------------------|---------------------|--------------------|
| 200 | JD63B200 JXD63B200 | – | 3VA5320-5EC31-0AA0 |
| 225 | JD63B225 JXD63B225 | – | 3VA5322-5EC31-0AA0 |
| 250 | JD63B250 JXD63B250 | NJG3B250L NJX3B250L | 3VA5325-5EC31-0AA0 |
| 300 | JD63B300 JXD63B300 | NJG3B300L NJX3B300L | 3VA5330-5EC31-0AA0 |
| 350 | JD63B350 JXD63B350 | NJG3B350L NJX3B350L | 3VA5335-5EC31-0AA0 |
| 400 | JD63B400 JXD63B400 | NJG3B400L NJX3B400L | 3VA5340-5EC31-0AA0 |

250A, 3P 65KAIC @ 480V

| Amperage | HFD6/HFXD6 | HFG | 3VA52**6 |
|----------|------------|----------|--------------------|
| 100 | HFD63B100 | HFK3B100 | 3VA5210-6EC31-0AA0 |
| 110 | HFD63B110 | HFK3B110 | 3VA5211-6EC31-0AA0 |
| 125 | HFD63B125 | HFK3B125 | 3VA5212-6EC31-0AA0 |
| 150 | HFD63B150 | HFK3B150 | 3VA5215-6EC31-0AA0 |
| 175 | HFD63B175 | HFK3B175 | 3VA5217-6EC31-0AA0 |
| 200 | HFD63B200 | HFK3B200 | 3VA5220-6EC31-0AA0 |
| 225 | HFD63B225 | HFK3B225 | 3VA5222-6EC31-0AA0 |
| 250 | HFD63B250 | HFK3B250 | 3VA5225-6EC31-0AA0 |

400A, 3P 65KAIC @ 480V

| Amperage | HJD6/HJXD6 | HJG/HJX | 3VA53**6 |
|----------|----------------------|---------------------|--------------------|
| 200 | HJD63B200 HJXD63B200 | – | 3VA5320-6EC31-0AA0 |
| 225 | HJD63B225 HJXD63B225 | – | 3VA5322-6EC31-0AA0 |
| 250 | HJD63B250 HJXD63B250 | HJG3B250L HJX3B250L | 3VA5325-6EC31-0AA0 |
| 300 | HJD63B300 HJXD63B300 | HJG3B300L HJX3B300L | 3VA5330-6EC31-0AA0 |
| 350 | HJD63B350 HJXD63B350 | HJG3B350L HJX3B350L | 3VA5335-6EC31-0AA0 |
| 400 | HJD63B400 HJXD63B400 | HJG3B400L HJX3B400L | 3VA5340-6EC31-0AA0 |

250A, 3P 100KAIC @ 480V

| Amperage | HHFD6/HHFXD6 | LFG | 3VA52**7 |
|----------|--------------|----------|--------------------|
| 100 | HHFD63B100 | LFK3B100 | 3VA5210-7EC31-0AA0 |
| 110 | HHFD63B110 | LFK3B110 | 3VA5211-7EC31-0AA0 |
| 125 | HHFD63B125 | LFK3B125 | 3VA5212-7EC31-0AA0 |
| 150 | HHFD63B150 | LFK3B150 | 3VA5215-7EC31-0AA0 |
| 175 | HHFD63B175 | LFK3B175 | 3VA5217-7EC31-0AA0 |
| 200 | HHFD63B200 | LFK3B200 | 3VA5220-7EC31-0AA0 |
| 225 | HHFD63B225 | LFK3B225 | 3VA5222-7EC31-0AA0 |
| 250 | HHFD63B250 | LFK3B250 | 3VA5225-7EC31-0AA0 |

400A, 3P 100KAIC @ 480V

| Amperage | HHJD6/HHJXD6 | LJG/LJX | 3VA53**7 |
|----------|------------------------|---------------------|--------------------|
| 200 | HHJD63B200 HHJXD63B200 | – | 3VA5320-7EC31-0AA0 |
| 225 | HHJD63B225 HHJXD63B225 | – | 3VA5322-7EC31-0AA0 |
| 250 | HHJD63B250 HHJXD63B250 | LJG3B250L LJX3B250L | 3VA5325-7EC31-0AA0 |
| 300 | HHJD63B300 HHJXD63B300 | LJG3B300L LJX3B300L | 3VA5330-7EC31-0AA0 |
| 350 | HHJD63B350 HHJXD63B350 | LJG3B350L LJX3B350L | 3VA5335-7EC31-0AA0 |
| 400 | HHJD63B400 HHJXD63B400 | LJG3B400L LJX3B400L | 3VA5340-7EC31-0AA0 |

600A TMTU Circuit Breaker Selection



| 600A, 3P 35KAIC @ 480V | | | |
|------------------------|-----------------------|------------------------|--------------------|
| Amperage | LD6/LXD6 | NLK | 3VA54**5 |
| 450 | LD63B450 LXD63B450 | NLK3B450L NLX3B450L | 3VA5445-5EC31-0AA0 |
| 500 | LD63B500 LXD63B500 | NLK3B500L NLX3B500L | 3VA5450-5EC31-0AA0 |
| 600 | LD63B600 LXD63B600 | NLK3B600L NLX3B600L | 3VA5460-5EC31-0AA0 |

| 600A, 3P 65KAIC @ 480V | | | |
|------------------------|-------------------------|------------------------|--------------------|
| Amperage | HLD6/HLXD6 | HLK | 3VA54**6 |
| 450 | HLD63B450 HLXD63B450 | HLK3B450L HLX3B450L | 3VA5445-6EC31-0AA0 |
| 500 | HLD63B500 HLXD63B500 | HLK3B500L HLX3B500L | 3VA5450-6EC31-0AA0 |
| 600 | HLD63B600 HLXD63B600 | HLK3B600L HLX3B600L | 3VA5460-6EC31-0AA0 |

| 600A, 3P 100KAIC @ 480V | | | |
|-------------------------|--------------------------|------------------------|--------------------|
| Amperage | HHL6/HHLXD6 | LLX | 3VA54**7 |
| 450 | HHL63B450 HHLXD63B450 | LLX3B450L LLX3B450L | 3VA5445-7EC31-0AA0 |
| 500 | HHL63B500 HHLXD63B500 | LLX3B500L LLX3B500L | 3VA5450-7EC31-0AA0 |
| 600 | HHL63B600 HHLXD63B600 | LLX3B600L LLX3B600L | 3VA5460-7EC31-0AA0 |

800A TMTU Circuit Breaker Selection



| 800A, 3P 35KAIC @ 480V | | | |
|------------------------|--------------------------|-----------|--------------------|
| Amperage | MD6/MXD6 (50KAIC @ 480V) | NMG | 3VA55**5 |
| 500 | MD63B500 MXD63B500 | NA | NA |
| 600 | MD63B600 MXD63B600 | NMG3B600L | 3VA5560-5EC32-0AA0 |
| 700 | MD63B700 MXD63B700 | NMG3B700L | 3VA5570-5EC32-0AA0 |
| 800 | MD63B800 MXD63B800 | NMG3B800L | 3VA5580-5EC32-0AA0 |

| 800A, 3P 65KAIC @ 480V | | | |
|------------------------|----------------------|-----------|--------------------|
| Amperage | HMD6/HMXD6 | HMG | 3VA55**6 |
| 500 | HMD63B500 HXMD63B500 | NA | NA |
| 600 | HMD63B600 HXMD63B600 | HMG3B600L | 3VA5560-6EC32-0AA0 |
| 700 | HMD63B700 HXMD63B700 | HMG3B700L | 3VA5570-6EC32-0AA0 |
| 800 | HMD63B800 HXMD63B800 | HMG3B800L | 3VA5580-6EC32-0AA0 |

| 800A, 3P 100KAIC @ 480V | | | |
|-------------------------|-----------|-----------|--------------------|
| Amperage | CMD6 | LMG | 3VA**7 |
| 500 | NA | NA | NA |
| 600 | CMD63B600 | LMG3B600L | 3VA5560-7EC32-0AA0 |
| 700 | CMD63B700 | LMG3B700L | 3VA5570-7EC32-0AA0 |
| 800 | CMD63B800 | LMG3B800L | 3VA5580-7EC32-0AA0 |

Note: All 3VA 800A breakers come with nut keepers installed.

1000A TMTU Circuit Breaker Selection



| 1000A, 3P 35KAIC @ 480V | | | |
|-------------------------|--------------------------|-----------|----------------------------|
| Amperage | ND6/NXD6 (50KAIC @ 480V) | NNG | 3VA66**5 (Electronic Trip) |
| 1000 | ND63B100 NXD63B100 | NNG3B100L | 3VA6610-5HL32-0AA0 |

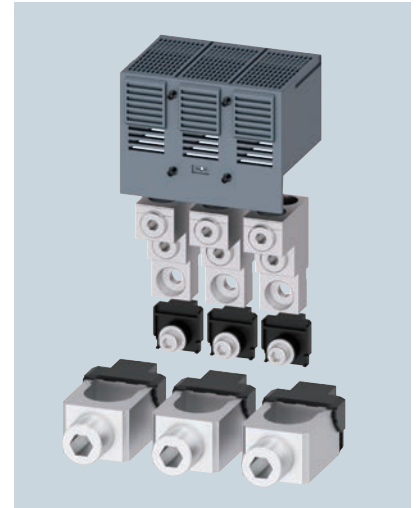
| 1000A, 3P 65KAIC @ 480V | | | |
|-------------------------|----------------------|-----------|----------------------------|
| Amperage | HND6/HNXD6 | HNG | 3VA66**6 (Electronic Trip) |
| 1000 | HND63B100 HNXD63B100 | HNG3B100L | 3VA6610-6HL32-0AA0 |

| 1000A, 3P 100KAIC @ 480V | | | |
|--------------------------|-----------|-----------|----------------------------|
| Amperage | CND6 | LNG | 3VA66**7 (Electronic Trip) |
| 1000 | CND63B100 | LNG3B100L | 3VA6610-7HL32-0AA0 |

Lug Selection

| | 3VA "Standard" lugs | Description | Cables Per Phase |
|--------------------|---------------------|-----------------------|------------------|
| 125A TMTU | 3VA91330JB11 | 3-POLE #14-3/0 | 1 |
| 250A TMTU | 3VA92330JB12 | 3-POLE #6-350KCMIL | 1 |
| 150A ETU | 3VA91430JB11 | 3-POLE #14-1/0 | 1 |
| 250A ETU | 3VA92430JB12 | 3-POLE #6-350KCMIL | 1 |
| 400/600A TMTU/ETU | 3VA9473-0JJ23 | 3-POLE 2/0 - 600KCMIL | 2 |
| 600/700A TMTU | 3VA9573-0JB23 | 3-POLE 4/0 - 600KCMIL | 2 |
| 800/1000A TMTU/ETU | 3VA9673-0JJ43 | 3-POLE 4/0 - 500KCMIL | 4 |

Note: For additional Lugs options reference section 7 of the online SpeedFax.



Internal Accessory Selection

| Description | Catalog No. |
|----------------------|--------------|
| Shunt Trip Flex 120V | 3VA99780BA22 |
| Shunt Trip Left 120V | 3VA99780BL32 |
| HQ Aux 1 Slot | 3VA99780AA12 |
| UVR 120V | 3VA99780BB24 |

Note: For additional accessory options, reference section 4 of the 3VA UL Catalog.

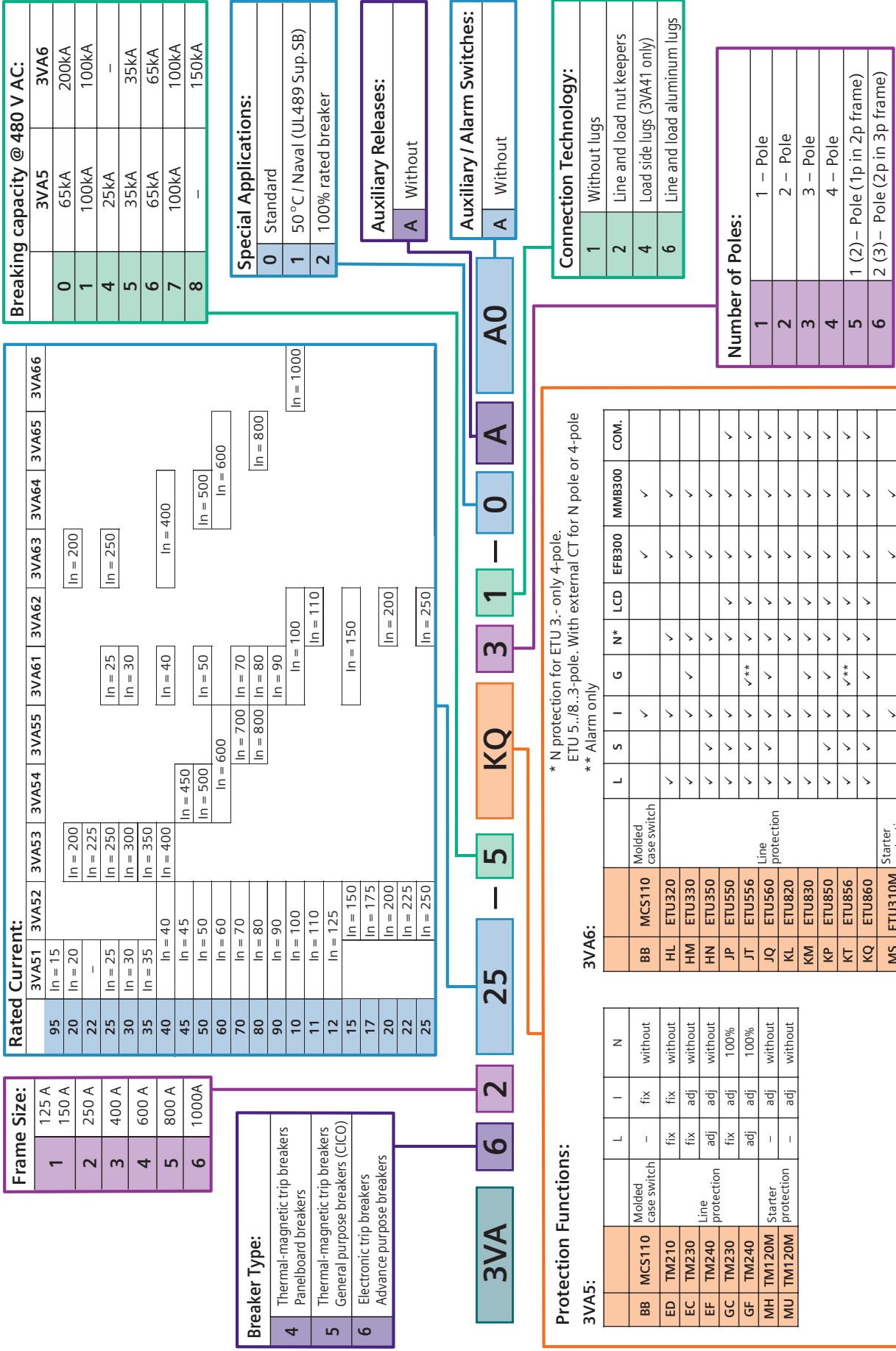


Enclosure Selection

| NEMA Type Enclosure | 125A Catalog No. | 150A/250A Catalog No. | 400/600A Catalog No. | 800/1000A Catalog No. |
|---------------------------|------------------|-----------------------|----------------------|-----------------------|
| 3VA NEMA 1 Surface | 3VAE125N1S | 3VAE250N1S | 3VAE6001S | 3VAE8001S |
| 3VA NEMA 1 Flush | 3VAE125N1F | 3VAE250N1F | 3VAE6001F | 3VAE8001F |
| 3VA NEMA 3R | 3VAE125N3R | 3VAE250N3R | 3VAE6003R | 3VAE8003R |
| 3VA NEMA 12 | 3VAE125N12 | 3VAE250N12 | 3VAE60012 | 3VAE80012 |
| 3VA NEMA 4X | 3VAE125N4X | 3VAE250N4X | 3VAE6004X | 3VAE8004X |
| 3VA NEMA 4X 316 Stainless | 3VAE125N4X316 | 3VAE250N4X316 | 3VAE6004X316 | 3VAE8004X316 |



3VA – UL molded case circuit breaker MLFB structure



Rated Current:

| | 3VA51 | 3VA52 | 3VA53 | 3VA54 | 3VA55 | 3VA61 | 3VA62 | 3VA63 | 3VA64 | 3VA65 | 3VA66 |
|----|----------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|
| 95 | In = 15 | | | | | | | | | | |
| 20 | In = 20 | | | | | | | | | | |
| 22 | – | | | | | | | | | | |
| 25 | In = 25 | | | | | In = 25 | | | | | |
| 30 | In = 30 | | | | | In = 30 | | | | | |
| 35 | In = 35 | | | | | | | | | | |
| 40 | In = 40 | | | | | In = 40 | | | | | |
| 45 | In = 45 | | | | | | | | | | |
| 50 | In = 50 | | | | | In = 50 | | | | | |
| 60 | In = 60 | | | | | | | | | | |
| 70 | In = 70 | | | | | In = 70 | | | | | |
| 80 | In = 80 | | | | | In = 80 | | | | | |
| 90 | In = 90 | | | | | In = 90 | | | | | |
| 10 | In = 100 | | | | | In = 100 | | | | | |
| 11 | In = 110 | | | | | In = 110 | | | | | |
| 12 | In = 125 | | | | | | | | | | |
| 15 | In = 150 | | | | | In = 150 | | | | | |
| 17 | In = 175 | | | | | | | | | | |
| 20 | In = 200 | | | | | In = 200 | | | | | |
| 22 | In = 225 | | | | | In = 225 | | | | | |
| 25 | In = 250 | | | | | In = 250 | | | | | |

Frame Size:

| | |
|---|-------|
| 1 | 125 A |
| 2 | 150 A |
| 3 | 250 A |
| 4 | 400 A |
| 5 | 600 A |
| 6 | 1000A |

Breaker Type:

| | |
|---|---|
| 4 | Thermal-magnetic trip breakers Panelboard breakers |
| 5 | Thermal-magnetic trip breakers General purpose breakers (CICO) |
| 6 | Electronic trip breakers Advance purpose breakers |

Special Applications:

| | |
|---|------------------------------|
| 0 | Standard |
| 1 | 50 °C / Naval (UL489 Sup.SB) |
| 2 | 100% rated breaker |

Auxiliary Releases:

| | |
|---|---------|
| A | Without |
|---|---------|

Auxiliary / Alarm Switches:

| | |
|---|---------|
| A | Without |
|---|---------|

Protection Functions:

3VA5:

| | Molded case switch | L | I | N |
|----|--------------------|-----|-----|---------|
| BB | MCS110 | – | fix | without |
| ED | TM210 | fix | fix | without |
| EC | TM230 | fix | adj | without |
| EF | TM240 | adj | adj | without |
| GC | TM230 | fix | fix | 100% |
| GF | TM240 | adj | adj | 100% |
| MH | TM120M | – | adj | without |
| MU | TM120M | – | adj | without |

3VA6:

| | Molded case switch | L | S | I | G | N* | LCD | EFB300 | MMB300 | COM. |
|----|--------------------|---|---|---|---|----|-----|--------|--------|------|
| BB | MCS110 | | | ✓ | | | | ✓ | ✓ | |
| HL | ETU320 | ✓ | | ✓ | | ✓ | | ✓ | ✓ | |
| HM | ETU330 | ✓ | | ✓ | | ✓ | | ✓ | ✓ | |
| HN | ETU350 | ✓ | | ✓ | | ✓ | | ✓ | ✓ | |
| JP | ETU550 | ✓ | | ✓ | | ✓ | | ✓ | ✓ | ✓ |
| JT | ETU556 | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| JQ | ETU560 | ✓ | | ✓ | | ✓ | | ✓ | ✓ | ✓ |
| KL | ETU820 | ✓ | | ✓ | | ✓ | | ✓ | ✓ | ✓ |
| KM | ETU830 | ✓ | | ✓ | | ✓ | | ✓ | ✓ | ✓ |
| KP | ETU850 | ✓ | | ✓ | | ✓ | | ✓ | ✓ | ✓ |
| KT | ETU856 | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| KQ | ETU860 | ✓ | | ✓ | | ✓ | | ✓ | ✓ | ✓ |
| MS | ETU310M | ✓ | | ✓ | | | | ✓ | ✓ | ✓ |

* N protection for ETU 3.- only 4-pole.
 ETU 5.,/8...3-pole. With external CT for N pole or 4-pole
 ** Alarm only

Connection Technology:

| | |
|---|-----------------------------|
| 1 | Without lugs |
| 2 | Line and load nut keepers |
| 4 | Load side lugs (3VA41 only) |
| 6 | Line and load aluminum lugs |

Number of Poles:

| | |
|---|------------------------------|
| 1 | 1 – Pole |
| 2 | 2 – Pole |
| 3 | 3 – Pole |
| 4 | 4 – Pole |
| 5 | 1 (2)– Pole (1p in 2p frame) |
| 6 | 2 (3)– Pole (2p in 3p frame) |

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Siemens Industry, Inc.
3617 Parkway Ln
Peachtree Corners, GA 30092

Siemens Technical Support: 1-800-333-7421
info.us@siemens.com

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