

3VA Molded Case Circuit Breakers

3VA64 600A Electronic Trip Circuit Breakers

Technical information

Connections for 75C wire for 3VA54 and 3VA64

| Type | Minimum cable size | Maximum cable size | Part Number (kit of 3 lugs) | Part Number (kit of 4 lugs) |
|---|--------------------|--------------------|-----------------------------|-----------------------------|
| Steel Wrap around (Cu cable only) single cable lugs | 1/0 | 500 kcmil | 3VA9473-0JA13 | 3VA9474-0JA13 |
| Aluminum Body Lug (Cu/Al cable) single cable lugs | AWG 1 | 600 kcmil | 3VA9373-0JB13 | 3VA9374-0JB13 |
| Aluminum body lug with control wire tap (Cu/Al cable) single cable lugs | AWG 1 | 600 kcmil | 3VA9373-0JG13 | 3VA9374-0JG13 |
| Aluminum body lug, 2 cables (Cu/Al cable) with 1 extended terminal cover | 2/0 | 600 kcmil | 3VA9473-0JJ23 | 3VA9474-0JJ23 |
| Aluminum body lug, 2 cables (Cu/Al cable) with control wire tap and 1 extended terminal cover | 2/0 | 600 kcmil | 3VA9473-0JC23 | 3VA9474-0JC23 |
| Distribution lug, 6 Cables (Cu/Al cable) with 1 extended terminal cover | AWG 14 | AWG 2 | 3VA9373-0JF60 | 3VA9374-0JF60 |
| Copper body lug (Cu cable only) single cable lugs (meets requirements for 100% rated breakers) | AWG 1 | 600 kcmil | 3VA9373-0JD13 | 3VA9374-0JD13 |
| Copper body lug (Cu cable only) with control wire tap single cable lugs | AWG 1 | 600 kcmil | 3VA9373-0JK13 | 3VA9374-0JK13 |
| Copper body lug, 2 cables (Cu cable only) with 1 extended terminal cover (meets requirements for 100% rated breakers) | 2/0 | 600 kcmil | 3VA9473-0JE23 | 3VA9474-0JE23 |
| Copper body lug, 2 cables (Cu cable only) with control wire tap and 1 extended terminal cover | 2/0 | 600 kcmil | 3VA9473-0JL23 | 3VA9474-0JL23 |

Enclosures for 3VA54 and 3VA64 (3-pole only)

| NEMA Type | Catalog Number |
|--------------|----------------|
| 1 Surface | 3VAE6001S |
| 1 Flush | 3VAE6001F |
| 3R | 3VAE6003R |
| 12 | 3VAE60012 |
| 4X (304) | 3VAE6004X |
| 4X (316) | 3VAE6004X316 |
| Neutral | HN656ACB |
| 200% Neutral | HN678ACB |

| Internal accessories Optional equipment | Slot No.: | 3VA5 & 3VA6 400/600 A 3-pole | | | | | | | | | | | | | | 3VA5 & 3VA6 400/600 A 4-pole | | | | | | | | | | | | | |
|--|----------------------------|------------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|------------------------------------|----|----|----|----|----|----|----|----|----|----|--|--|--|
| | | 25 | 24 | 23 | 22 | 21 | 11 | 12 | 13 | 14 | 15 | 35 | 34 | 33 | 32 | 31 | 25 | 24 | 23 | 22 | 21 | 11 | 12 | 13 | 14 | 15 | | | |
| Auxiliary switch | Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | AUX_HQ | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | |
| | AUX_HQ_el | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | |
| | AUX_HP | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | |
| Leading changeover switch | LCS_HQ | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | |
| | LCS_HQ_el | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | |
| | LCS_HP | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | |
| Alarm switch | Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | TAS_HQ | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | |
| | TAS_HQ_el | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | |
| | TAS_HP | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | |
| Electrical alarm switch [Ⓞ] | EAS_HQ | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | |
| | EAS_HQ_el | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | |
| Auxiliary release | Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | STF | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | |
| | STL | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | |
| Undervoltage release | UVR | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | |
| Universal release | UNI | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | |
| ETU/communication [Ⓞ] | Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | COM060 | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | |
| 24 V module | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Cylinder lock (type Ronis) | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | | x x x x x x x x x x x x x x x x | | | | | | | | | | | | | |

Trip Settings for 3VA64

ETU320-LI, ETU330-LIG, ETU350-LSI

| Continuous Amperage | LI, LIG, LSI | | | LSI | | LIG | LI, LIG, LSI 4P only | |
|---------------------|----------------------|--------------------------|---------------------------|---------------------------------------|--|-----------|---------------------------|---------------------------------------|
| | I _n (Amp) | I _r (Amp) (L) | t _{id} (sec) (L) | I _i (Amp) (I) [Ⓞ] | I _{sd} =xI _r (Amp) (S) | | t _{sd} (sec) (S) | I _N =xI _r (Amp) |
| 400 | 150 - 400 | 0.5 - 17 | 600-4800 | 1.5 - 10 | 0.08 - 0.4 | 80 - 400 | 0.5 - 1 / OFF | |
| 600 | 250 - 600 | 0.5 - 15 | 900-5400 | 1.5 - 9 | | 120 - 600 | 0.5 - 1 / OFF | |

Ⓞ I_i for ETU350 is fixed at the maximum level shown in table.

ETU550-LSI, ETU556 LSI(A), ETU560-LSIG, ETU820-LI, ETU830-LIG, ETU850-LSI, ETU856 LSI(A), ETU860-LSIG

| Continuous Amperage | LI, LIG, LSI, LSI(G) | | | LSI, LSI(G), LSI(G) | | LIG, LSI(G), LSI(G) | | LSI 3P with External CT | LI, LIG, LSI, LSI(G), LSI(G) 4P only | |
|---------------------|----------------------|--------------------------|---------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------|--------------------------------------|---------------------------------------|
| | I _n (Amp) | I _r (Amp) (L) | t _{id} (sec) (L) | I _i (Amp) (I) | I _{sd} (Amp) (S) | t _{sd} (sec) (S) | I _g (Amp) (G) | | t _g (G) | I _N =xI _r (Amp) |
| 400 | 150 - 400 | 0.5 - 25 | 600-4800 | 240 - 4000 | 0.05 - 0.5 | 80 - 400 | 0.05 - 0.8 | 80 - 640 / OFF | 80 - 600 / OFF | |
| 600 | 250 - 600 | 0.5 - 15 | 900-5400 | 360 - 5400 | | 120 - 600 | | 120 - 960 / OFF | 120 - 600 / OFF | |

For specific trip settings refer to the Electronic Trip Unit section of the 3VA Systems Manual, which can be found in the document download center at https://www.siemens.com/download?BTLV_50412

Ⓞ These accessories are for electronic trip breakers only.

See page 7-69 for internal accessory part numbers.

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