AXIO



Product Overview

The AX-CT-EM-xxx range of Current Transformers are a range of moulded current transformers. The range offer wide system current ratings, apertures, busbar and case sizes to suit every application. The units are designed to meet EN 60044 and accuracy upto class 0.5

Features

- Wide range of apertures and case sizes
- 3 Accuracies dependant on VA

• Rating from 50A to 6000A

5 A Secondary

Specifications

| Active energy accuracy: | Class 1 |
|--|---|
| System voltage: | 720V maximum |
| Test voltage | 3kV for 1 minute |
| System frequency: | 50/60Hz |
| Short circuit thermal current (ith)*: | 60 x rated primary current for T second |
| Overload withstand: | 1.2 x rated current continuously |
| Dynamic current (ldyn)*: | = 255 x ith |
| Saturation coefficient: | <5 for through aperture models <10 for wound primary |
| Service temperature: | -20°C to 85°C |
| Insulation class: | Class E 852757 IEC85 |
| Enclosure code: | IP40 |
| Integral terminal cover: | IP208 |
| Complies with: | IEC 60044-1:2003 |
| Humidity: | Up to 95% RH (non condensing) |
| Secondary terminals screw clamp: | Up to 10mm ² cable |
| 'Fast On': | 6.3mm type |

•

Loss in copper wires between instrument and CT for 5A secondary

| Wire section | and the second second | Loss | in VA dor | VA (for both wires) | | |
|--------------|-----------------------|------|-----------|---------------------|------|------|
| in mm' | 10 | 2m | 4 4 1 | 6m | Bm | 10m |
| 1.5 | 0.60 | 119 | 2.38 | 3.57 | 4.76 | 5.95 |
| 2.5 | 0.36 | 0.71 | 1.43 | 214 | 2.86 | 3.57 |
| 4 | 0.22 | 0.45 | 0.89 | 1.34 | 179 | 2.23 |
| 6 | 015 | 0.30 | 0.60 | 1.89 | 1.19 | 1.49 |
| 10 | 0.09 | 0.18 | 0.36 | 0.54 | 0.71 | 0.89 |

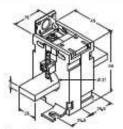
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Installation SAFETY NOTE:

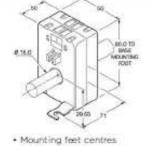
Prior to Installation ensure that all power sources are disconnected and locked-out and remain locked out during Installation and set-up, as severe injury or death can result from Electric Shock due to contact with High Voltage Conductors. Ensure all installations are in complance with applicable electrical codes and that the installation is carried out by qualified installers familiar with the relevant standards and proper safety procedures for high voltage installations. Never rely on status indication on any device to determine if power is present in a conductor. Solid core devices require that the line to be monitored be disconnected and passed through the centre. Split core devices can be easily installed over existing wires





 Mounting feet centres 26mm x 51mm





33mm x 71mm

M53Q Range

Case Size: 45mm wide x 30mm deep x 65mm high 18" wide x 12" deep x 2.5" high Aperture: 20 x 6mm and 21mm diameter 0.8" x 02" and 0.8" diameter Weight: 0.25kg

| SQ 60/5 1.25 - SQ 75/5 1.5 - SQ 80/5 1.5 - SQ 80/5 1.5 - SQ 100/5 2.5 1.5 SQ 125/5 3 2.5 | Model type | Ratio range | VA at Class 3 | VA at Class 1 |
|--|------------|-------------|-------------------|---------------|
| 3Q 75/5 1.5 - 3Q 80/5 1.5 - 3Q 100/5 2.5 1.5 3Q 100/5 2.5 1.5 3Q 125/5 3 2.5 | M53Q | 50/5 | 1 | 2 |
| SQ. BQ/5 1.5 - SQ. DQ/5 2.5 1.5 SQ. DQ/5 2.5 1.5 SQ. 125/5 3 2.5 | M53Q | 60/5 | 1.25 | |
| 3Q 100/5 2.5 1.5 3Q 125/5 3 2.5 | M53Q | 75/5 | 1.5 | 2 |
| 3Q 125/5 3 2.5 | M53Q | 80/5 | 1.5 | - |
| | M53Q | 100/5 | 2.5 | 1.5 |
| 20 KOK 775 25 | M53Q | 125/5 | 3 | 2.5 |
| 204 00/0 3.7.0 2.3 | M53Q | 150/5 | 3.75 | 2.5 |
| 3Q 20Q/5 5 3.75 | M53Q | 200/5 | 5 | 3.75 |
| SQ 250/5 - 5 | M53Q | 25/0/5 | the second second | 5 |
| 3Q 300/5 7.5 5 | M53Q | 300/5 | 7.5 | 5 |

Ordering Codes

| M53Q | Add suffix to depict required ratio range. For example: M53Q-50/5 | |
|-------------|--|--|
| M30-DINCLIP | DIN-rail mounting clip for DIN-rail mounting option (2 required) | |

M55E Range

Case Size: S0mm wide x 50mm deep x 80mm high 2" wide x 2" deep x 31" high Aperture: 15 x 5mm and 16 diameter 0.6" x 0.2" diameter Weight: 0.4 Kg

| Model type | Ratio range | VA at Class 3 | VA at Class 1 |
|------------|-------------|---------------|---------------|
| MSSE | 30/5 | 1.25 | - |
| MS5E | 40/5 | 2.5 | 23 |
| M55E | 50/5 | 2.5 | |
| MSSE | 60/5 | 3.75 | 2.5 |
| M55E | 75/5 | 5 | 3.75 |
| MISSE | 80/5 | 5 | 3.75 |
| M55E | 100/5 | 7.5 | 5 |

Ordering Codes

| ereaning eese | 6 | |
|---------------|--|--|
| MSSE | Add suffix to depict required ratio range. For example: M55E-60/5 | |
| M50-DINCLIP | DIN-rail mounting clip for DIN-rail mounting option. (2 required) | |

Every effort has been taken in the production of this data sheet to ensure it's accuracy. Axio can not, however, accept responsibility for any damage, expense, injury, loss or consequential loss resulting from any errors or omissions. Axio has a policy of continuous improvement and reserves the right to change this specification without notice.

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MA5Y Range

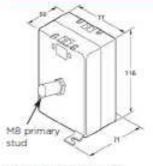
| Case Size | 77mm wide x 50mm deep x 116mm high |
|-----------|------------------------------------|
| | 3" wide x 2" deep x 4.5" high |
| Fixing | M8 stud primary bar |
| Weight | 0.45Kg |

| Model type | Ratio range | VA at Class 3 | VA at Class 1 |
|------------|-------------|---------------|---------------|
| MASY | 1/5 | 7.5 | 5 |
| MASY | 5/5 | 7.5 | 5 |
| MASY | 10/5 | 7.5 | 5 |
| MASY | 15/5 | 7.5 | 5 |
| MASY | 20/5 | 7.5 | 5 |
| MASY | 30/5 | 7.5 | 5 |
| MASY | 40/5 | 7.5 | 5 |

Ordering Codes

| MA5Y | Add suffix to depict required ratio range. For example: MASY-5/5 | | |
|-------------|---|--|--|
| M50-DINCLIP | DIN-rail mounting dip for DIN-rail mounting option (2 required) | | |





Mounting feet centres
58.5mm x 71mm

M93L Range

Case Size: 90mm wide x 30mm deep x 131mm high 3.5" wide x 12" deep x 5.1" high Aperture: 50 x 10mm, 40 x 30mm and 32mm diameter 2" x 0.4", 1.5" x 1.2" and 13" diameter

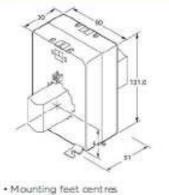
Weight: 0.45Kg

| Model type | Ratio range | VA at Class 3 | VA at Class T | VA at Class 0.5 |
|------------|-------------|------------------|------------------|--------------------|
| M93L | 400/5 | 15 | 7.5 | 3.75 |
| M93L | 500/5 | 20 | 15 | 5 |
| M93L | 600/5 | 30 | 20 | 10 |
| M931. | 750/5 | 20 | 15 | 7.5 |
| M93L | 800/5 | 20 | 15 | 10 |
| M93L | 1000/5 | 20 | 20 | 15 |
| M93L | 1200/5 | 30 | 30 | 20 |
| M93L | 1250/5 | 30 | 30 | 20 |
| M93L | 1500/5 | 30 | 30 | 20 |
| M93L | 1600/5 | 30 | 30 | 20 |

Ordering Codes

| Add suffix to depict required ratio range. For example: M93L-400/5 | | |
|---|--|--|
| DIN-rail mounting clip for DIN-rail mounting option (2 required) | | |
| | | |





71.5mm x 51mm

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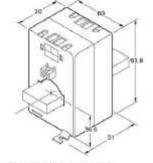
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 Mounting feet centres 42mm x 5imm

M63N Range

| Model type | Ratio range | VA at Class 3 | VA at Class 1 | VA at Class 0.5 |
|------------|-------------|------------------|------------------|--------------------|
| M63N | 200/5 | 2.5 | - | 12 |
| M63N | 250/5 | 3.75 | 2.5 | - |
| M63N | 300/5 | 5 | 3.75 | 12 |
| M63N | 400/5 | 7.5 | 5 | 14 |
| M63N | 500/5 | 10 | 7.5 | 3.75 |
| M63N | 600/5 | 10 | 7.5 | 5 |
| M63N | 750/5 | 15 | 10 | 7.5 |
| M63N | 800/5 | 15 | 10 | 7.5 |

Ordering Codes

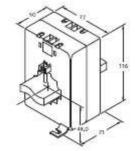
MA5G Range

Weight 0.6Kg

Case Size: 77mm wide x 50mm deep x 116mm high 3* wide x 2* deep x 4.5* high Aperture: 40 x 10mm, 30 x 30mm and 36mm diameter 1.6* x 0.4*, 1.2* x 1.2* and 1.4* diameter

| M63N | Add suffix to depict required ratio range. For example: M63N-200/5 | |
|-------------|---|--|
| M30-DINCLIP | DIN-rail mounting clip for DIN-rail mounting option (2 required) | |





 Mounting feet centres 58.5mm x 71mm

| Model type | Ratio range | VA at Class 3 | VA at Class 1 | VA at Class 0.5 |
|------------|-------------|------------------|------------------|--------------------|
| MASG | 100/5 | 2.5 | | 1 |
| MASG | 125/5 | 5 | 2.5 | - 21 |
| MASG | 150/5 | 5 | 3.75 | - |
| MA5G | 200/5 | 10 | 5 | 2.5 |
| MA5G | 250/5 | 10 | 7.5 | 5 |
| MASG | 300/5 | 10 | 7.5 | 5 |
| MA5G | 400/5 | 10 | 7.5 | 5 |
| MA5G | 500/5 | 10 | 7.5 | 5 |
| MA5G | 600/5 | 10 | 10 | 7.5 |
| MASG | 750/5 | 15 | 10 | 10 |
| MA5G | 800/5 | 15 | 10 | 10 |
| MA5G | 1000/5 | 20 | 15 | 15 |
| | | | | |

Ordering Codes

| MA5G | Add suffix to depict required ratio range. For example: MA5G-100/5 | |
|-------------|---|--|
| M50-DINCLIP | DIN-rail mounting clip for DIN-rail mounting option (2 required) | |

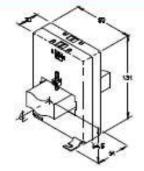
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 Mounting feet centres 71.5mm x 51mm

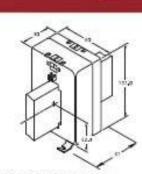
M93R Range

Case Size: 90mm wide x 30mm deep x 131mm high 3.5" wide x 12" deep x 5.1" high Aperture: 64 x 12.6mm, 60 x 30mm 2.5" x 0.5", 2.4" x 12" Weight: 0.6Kg

| Model type | Ratio range | VA at Class 3 | VA at Class 1 | VA at Class 0.5 |
|---------------|-------------|------------------|------------------|--------------------|
| M93R | 800/5 | 10 | 10 | 5 |
| M93R | 1000/5 | 15 | 10 | 7.5 |
| M93R | 1200/5 | 20 | 15 | 10 |
| M93R | 1250/5 | 20 | 15 | 10 |
| M93R | 1500/5 | 20 | 20 | 15 |
| M93R | 1600/5 | 20 | 20 | 15 |
| M93R | 2000/5 | 30 | 20 | 20 |

Ordering Codes

| M93R | Add suffix to depict required ratio range. For example: M93R-800/5 | | |
|-------------|---|--|--|
| M30-DINCLIP | DIN-rail mounting dip for DIN-rail mounting option (2 required) | | |



 Mounting feet centres 71.5mm x Simm

M93S Range

Case Size: 90mm wide x 30mm deep x 13mm high 3.5" wide x 12" deep x 51" high Aperture: 76.5 x 9mm, 60 x 30mm 3.0" x 0.7", 2.4" x 1.2" Weight: 0.7Kg

| Model type | Ratio range | VA at Class 3 | VA at Class 1 | VA at Class 0.5 |
|------------|-------------|------------------|------------------|--------------------|
| M935 | B00/5A | 10 | 10 | 5 |
| M935 | 1000/5A | 15 | 10 | 7.5 |
| M935 | 1200/5A | 20 | 15 | 10 |
| M935 | 1250/5A | 20 | 20 | 15 |
| M935 | 1500/SA | 20 | 20 | 15 |
| M935 | 16.00/5A | 30 | 20 | 15 |
| M935 | 2000/5 | 30 | 20 | 15 |

Ordering Codes

| M935 | Add suffix to depict required ratio range. For example: M935-800/5 |
|-------------|---|
| M30-DINCLIP | DIN-rail mounting clip for DIN-rail mounting option (2 required) |

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MC5T Range

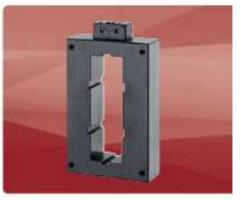
Case Size: 140mm wide x 50mm deep x 238mm high 5.5" wide x 2" deep x 9.3" high Aperture: 160 x 50mm 6.3" x 2'

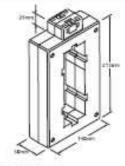
Weight /15Kg

| Model type | Ratio range | VA at Class 3 | VA at Class 1 | VA at Class 0.5 |
|------------|-------------|------------------|------------------|--------------------|
| MCST | 16 00/5 | 45 | 30 | 20 |
| MC5T | 2000/5 | 45 | 30 | 20 |
| MCST | 2500/5 | 60 | 45 | 30 |
| MCST | 3000/5 | 60 | 45 | 30 |
| MCST | 3200/5 | 60 | 45 | 30 |
| MC5T | 4000/5 | 60 | 45 | 30 |
| MCST | 5000/5 | 60 | 45 | 30 |
| MCST | 6000/5 | 60 | 45 | 30 |
| | | | | |

Ordering Codes

| MCST | Add suffix to depict required ratio range. |
|------|--|
| | For example: MCST-1600/S |





· Hole for M6 diameter screws or busber mounting

MD5T Range

Case Size 213mm wide x 50mm deep x 165mm high 8.3' wide x 2' deep x 6.5' high n.

| Aperture: | 16.0 | × 3 | 50m | it: |
|-----------|------|-----|-----|-----|
| | 6.20 | 4 | 24 | |

Weight +/-15Kg

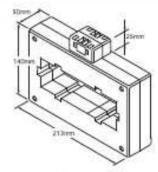
| Model type | Ratio range | VA at Class 3 | VA at Class 1 | VA at Class 0.5 |
|------------|-------------|------------------|------------------|--------------------|
| MD5T | 1600/5 | 45 | 30 | 20 |
| MD5T | 2000/5 | 45 | 30 | 20 |
| MOST | 2500/5 | 60 | 45 | 30 |
| MD5T | 3000/5 | 60 | 45 | 30 |
| MDST | 4000/5 | 60 | 45 | 30 |
| MD5T | 5000/5 | 60 | 45 | 30 |
| MDST | 6000/5 | 60 | 45 | 30 |

Ordering Codes

| MD5T | Add suffix to depict required ratio range. For example: MDST-1600/5 | |
|------|--|--|
| | | |

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· Hole for M5 diameter screws or busber mounting

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Moulded Case Overview Range

| Type | MASY | | M530 | | MSSE | | MSSJ | | MESP | | HESH | | NA50 | | MOSE | |
|---|--------|----|-------|----|------|----|----------------|----|-------|------|-------|-----|-----------|-------------|-------|----|
| Inside diameter (mm) | | 11 | 21 | 11 | 162 | 1 | 25 | 1 | 23 | 11 | 32 | 1 | 36 | 8 | 32 | 2 |
| Busbar | MESTAL | | 20(6) | | 15:6 | | 30x10 | | 20x30 | | 40:30 | | 40×10 | | 50x10 | |
| | | | _ | _ | | | 25/15 20x20 | _ | | | | | 30+30 | | 40+30 | _ |
| Dimensions (mm) | | - | | | | - | | - | | | | | | - | | |
| Haight | 116 | | 65 | | 80 | | 80 | | 94 | | 94 | | 716 | | 131 | |
| Wktth | 77 | | 45 | | 50 | | 50 | | 60 | | 60 | | 37 | | 00 | |
| D-p(T) | 50 | | 30 | | 50 | - | 50 | | 50 | | 30 | | 50 | | 30 | |
| DiN-rail mounting | × | × | × | * | × | х | × | 10 | X | X | × | X | × | x | X | x |
| Foot mounting | × | x | x | x | x | x | × | x | × | x | x | x | × | x | X | х |
| Intergrated terminal cover | x | x | x | X | × | × | x | ×. | x | ×. | × | × | × | X | × | x |
| Secondary | 5 | 51 | 5 | 1 | 5 | 1 | 5 | 1 | 5 | 1 | 5 | 1 | 5 | 1 | 5 | 51 |
| Primary current | | | | | 1100 | | | | | | | | | | | |
| 1 | × | × | | | | | | | | | | | | | | |
| 5 | × | X | | - | | | | | | | | | | | | |
| 10 | x | × | | - | - | | - | - | | | | | | | | |
| 8 | × | 36 | | | | | | | | | | - | | - | | - |
| 20 | x | × | - | - | X | 18 | | - | | - | | - | | - | | |
| 30 | × | x | | - | × | 38 | | | x | 38 | | - | | - | | _ |
| 40 | ×. | | | | X | 18 | | | × | 18 | - | | - | | - | |
| 50 | - | - | × | :× | X | X | - | | X | X | | - | | - | | |
| 60 | | | X | 10 | Ŷ | X | - | | 12 | x | - | - | - | - | | - |
| 9 2 | - | | | | | | - | - | | | - | - | | - | - | - |
| 75 | _ | | X | X | X | X | - | | X | X | - | | - | | - | _ |
| | | - | | | | - | 1.1 | | 11111 | | | - | 1.1.1.1.1 | | | - |
| 100 | - | _ | × | × | × | × | X | - | X | × | - | - | × | × | - | - |
| 25 | _ | | х | ्र | - | _ | x | | × | ×. | | | x | <u>.</u> ж. | | |
| 150 | _ | | × | X | - | - | X | - | × | X | - | - | X | × | - | - |
| 160 | | _ | | | | _ | × | | | | | | | | | |
| 200 | | - | X | × | - | _ | × | _ | × | × | X | × | × | × | | - |
| 250 | | | X | × | - | | X | | × | X | × | X | x | SX. | | |
| 300 | | - | X | × | - | - | 1.28 | - | 128 | . X. | × | . × | | . × | - | - |
| 400 | | | | | | | ×. | | | | × | X | × | X | × | |
| 500 | | 1 | | | | - | | - | | - | × | 1.8 | 1.2 | ×. | 18 | 1 |
| 600 | | | 1 | | | | | | | | × | (¥. | 18 | (X) | 18 | |
| 750 | | | | | | | | - | | | × | × | x | × | X | |
| 800 | | | | | 1 | - | | - | | - | × | X | × | X | × | - |
| 000 | | | | | | | | | | | | | ×. | ×. | - X | |
| 1200 | | - | | | | | | | | | | | 1.1 | | × | |
| 1250 | | | | | | | | | | | | | | | | |
| 600 | | | | | | | 1 | | | | | | | | × | |
| 16.00 | | | | | | | | | | | | | | | × | |
| 2000 | | | | | | | | | | | | | | | | |
| 2500 | | | | | | | | | | | | | | | | |
| 3000 | | | | | | | | | | | | | | | | |
| 3200 | | | | | | | | | | | | | | - | | |
| 4000 | | 1 | | | | 1 | | - | | 1 | | | | | | |
| 5000 | | | | | | | 1 | | | | | | | | | |
| 60.00 | | - | | | | | | - | | | | | | - | | |
| 5+5=5 | | | | | | - | | - | | - | | | | | | |
| 5+5+5=5 | | | | | | | | | | | | | | | | |
| 5+5+5+5=5 | | | | | | - | | - | | - | | - | | - | | - |
| 5+5+5+5+5=5 | | | | | | | | | | | | | | | | |
| 5+5+5+5+5+5=5 | | 1 | | | - | - | - | - | | - | | - | - | - | | - |
| 1+1=1 | | | | | | | - | | | | | | | | | |
| 1+1+1=1 | | - | | - | | | | - | 1 | - | | | | | | - |
| in the second | | | | - | | | | - | | | | - | | | | - |
| 1+1+1+1=1 | _ | | | | | | - | | - | | | | | | | - |
| 1+1+1+1+1=1 | | 1 | | | 1 | _ | - | _ | - | - | - | - | - | - | - | - |

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