



Product designation

Power contactor

Product type designation

B115

Contact characteristics

| | | |
|--|---|-------|
| Number of poles | Nr. | 4 |
| Rated insulation voltage U_i IEC/EN | V | 1000 |
| Rated impulse withstand voltage U_{imp} | kV | 8 |
| Operational frequency | min Hz | 25 |
| | max Hz | 400 |
| IEC Conventional free air thermal current I_{th} | A | 160 |
| Operational current I_e | | |
| | AC-1 ($\leq 40^\circ\text{C}$) | A 160 |
| | AC-1 ($\leq 55^\circ\text{C}$) | A 150 |
| | AC-1 ($\leq 70^\circ\text{C}$) | A 110 |
| | AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$) | A 110 |
| | AC-4 (400V) | A 47 |
| Rated operational power AC-1 ($T \leq 40^\circ\text{C}$) | | |
| | 230V kW | 57 |
| | 400V kW | 98 |
| | 500V kW | 129 |
| | 690V kW | 173 |
| IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series | | |
| | 75V A | 160 |
| | 110V A | 100 |
| | 220V A | — |
| | 330V A | — |
| | 460V A | — |
| IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series | | |
| | 75V A | 160 |
| | 110V A | 130 |
| | 220V A | 100 |
| | 330V A | — |
| | 460V A | — |
| IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series | | |
| | 75V A | 160 |
| | 110V A | 130 |
| | 220V A | 130 |
| | 330V A | 100 |
| | 460V A | — |
| IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series | | |
| | 75V A | 160 |
| | 110V A | 130 |
| | 220V A | 130 |
| | 330V A | 130 |
| | 460V A | 100 |

IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series

| | | |
|------|---|-----|
| 75V | A | 140 |
| 110V | A | 70 |
| 220V | A | — |
| 330V | A | — |
| 460V | A | — |

IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series

| | | |
|------|---|-----|
| 75V | A | 140 |
| 110V | A | 100 |
| 220V | A | 80 |
| 330V | A | — |
| 460V | A | — |

IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series

| | | |
|------|---|-----|
| 75V | A | 140 |
| 110V | A | 120 |
| 220V | A | 100 |
| 330V | A | 80 |
| 460V | A | — |

IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 4 poles in series

| | | |
|------|---|-----|
| 75V | A | 140 |
| 110V | A | 120 |
| 220V | A | 120 |
| 330V | A | 120 |
| 460V | A | 80 |

Short-time allowable current for 10s (IEC/EN60947-1)

| | |
|---|------|
| A | 1100 |
|---|------|

Protection fuse

| | | |
|----------|---|-----|
| gG (IEC) | A | 200 |
| aM (IEC) | A | 125 |

Making capacity (RMS value)

| | |
|---|------|
| A | 1300 |
|---|------|

Breaking capacity at voltage

| | | |
|------|---|------|
| 440V | A | 1300 |
| 500V | A | 1100 |
| 690V | A | 880 |

Resistance per pole (average value)

| | |
|----|-----|
| m? | 0.3 |
|----|-----|

Power dissipation per pole (average value)

| | | |
|-----|---|-----|
| Ith | W | 7.7 |
| AC3 | W | 4 |

Tightening torque for terminals

| | | |
|-----|------|-----|
| min | Nm | 10 |
| max | Nm | 10 |
| min | lbin | 7.4 |
| max | lbin | 7.4 |

Max number of wires simultaneously connectable

| | |
|-----|---|
| Nr. | 2 |
|-----|---|

Conductor section

AWG/Kcmil

| | |
|-----|-----|
| max | 2/0 |
|-----|-----|

Power terminal protection according to IEC/EN 60529

IP00

Mechanical features

Operating position

| | |
|---------------------|-----------------------|
| normal allowable | Vertical plan ±30° |
|---------------------|-----------------------|

Fixing

Screw

Weight

| | |
|---|------|
| g | 6250 |
|---|------|

Conductor section

AWG/kcmil conductor section

max 2/0

Operations

Mechanical life cycles 10000000

Electrical life cycles 1100000

Safety related data

Performance level B10d according to EN/ISO 13489-1

rated load mechanical load cycles cycles 1100000 10000000

Mirror contacts according to IEC/EN 60947-4-1 yes

EMC compatibility yes

AC coil operating

Rated AC voltage at 50/60Hz V 48

AC operating voltage

of 50/60Hz coil powered at 50Hz
pick-up

min %Us 80
max %Us 110

drop-out

min %Us 20
max %Us 60

of 50/60Hz coil powered at 60Hz
pick-up

min %Us 80
max %Us 110

drop-out

min %Us 20
max %Us 60

of 60Hz coil powered at 60Hz
pick-up

min %Us 80
max %Us 110

drop-out

min %Us 20
max %Us 60

AC average coil consumption at 20°C

of 50/60Hz coil powered at 50Hz

in-rush VA 300
holding VA 10

of 50/60Hz coil powered at 60Hz

in-rush VA 300
holding VA 10

Dissipation at holding ≤20°C 50Hz W 10

DC coil operating

DC rated control voltage V 48

DC operating voltage

pick-up

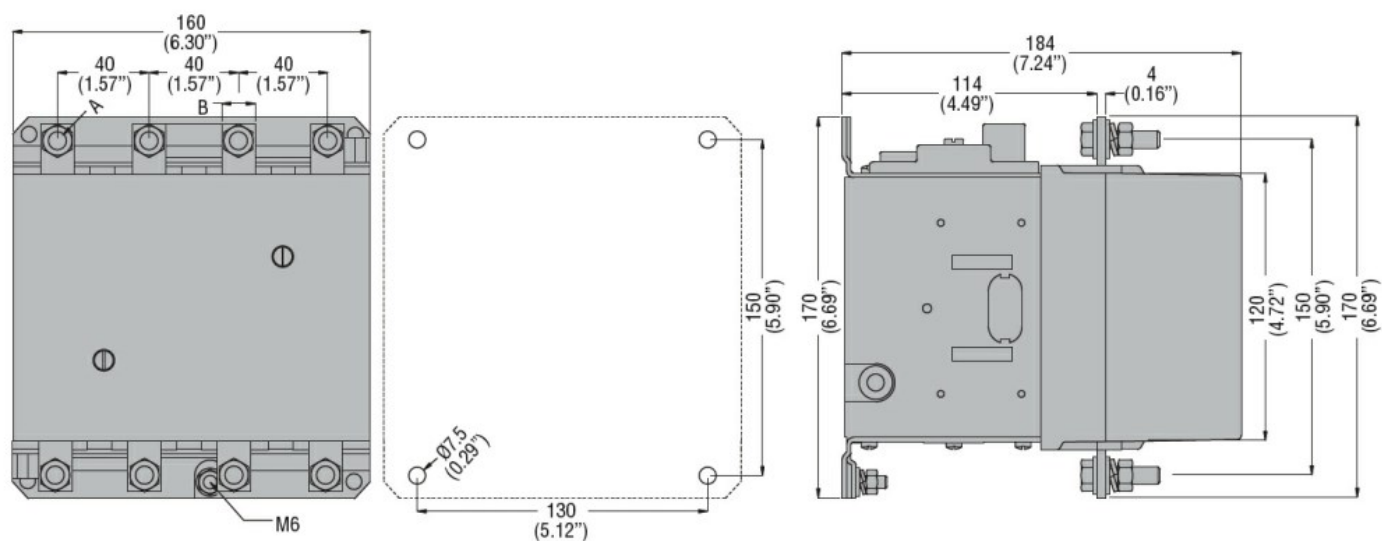
min %Us 80
max %Us 110

drop-out

min %Us 20
max %Us 60

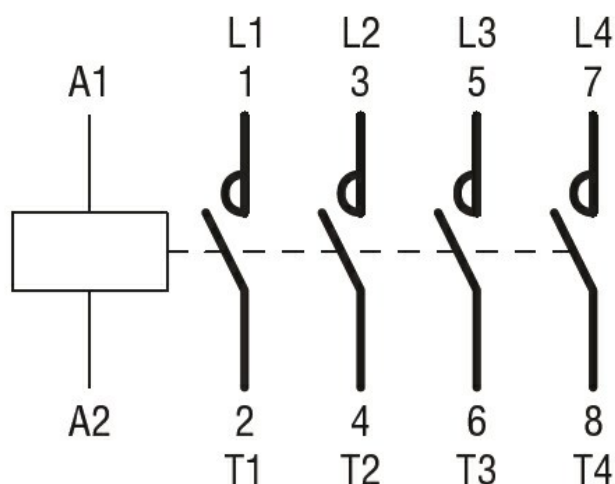
Average coil consumption ≤20°C

| | | | | |
|--|--------------------------|-----------------------|----------|--------|
| | | in-rush | W | 300 |
| | | holding | W | 10 |
| Max cycles frequency | | | | |
| Mechanical operation | | | cycles/h | 2400 |
| Operating times | | | | |
| Average time for Us control | | | | |
| | in AC | Closing NO | min | ms 60 |
| | | | max | ms 100 |
| | | Opening NO | min | ms 25 |
| | | | max | ms 60 |
| | in DC | Closing NO | min | ms 60 |
| | | | max | ms 100 |
| | | Opening NO | min | ms 25 |
| | | | max | ms 60 |
| UL technical data | | | | |
| Full-load current (FLA) for three-phase AC motor | | | | |
| | | at 480V | A | 96 |
| | | at 600V | A | 99 |
| Yielded mechanical performance | | | | |
| | for three-phase AC motor | 200/208V | HP | 30 |
| | | 220/230V | HP | 40 |
| | | 460/480V | HP | 75 |
| | | 575/600V | HP | 100 |
| General USE | | | | |
| | Contactor | AC current | A | 160 |
| Short-circuit protection fuse, 600V | | | | |
| | Standard fault | Short circuit current | kA | 5 |
| | | Fuse rating | A | 500 |
| | | Fuse class | | RK5 |
| Ambient conditions | | | | |
| Temperature | | | | |
| | Operating temperature | min | °C | -50 |
| | | max | °C | 70 |
| | Storage temperature | min | °C | -60 |
| | | max | °C | 80 |
| Max altitude | | | m | 3000 |
| Resistance & Protection | | | | |
| Pollution degree | | | | 3 |
| Dimensions | | | | |



| CONTACTOR TYPE | A | B |
|----------------|----|------------|
| B115 | M6 | 15 (0.59") |
| B145 | M8 | 20 (0.79") |
| B180 | M8 | 20 (0.79") |

Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1
CSA C22.2 n° 60947-4-1
IEC/EN 60947-1
IEC/EN 60947-4-1
UL 60947-1
UL 60947-4-1

Certificates

CCC
cULus
EAC

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching