
EFFECTIVE 22ND FEBRUARY, 2024

SACE FORMULA AIR

SACE FORMULA DSP P1-P4

Low voltage circuit-breakers



SACE FORMULA DSP P1-P4

Low voltage moulded-case circuit-breakers





ABB FORMULA DSP P1-P4

Performance made simple

SACE FORMULA DSP is part of the ABB FORMULA range, a complete product range for standard applications dedicated to residential, commercial and industrial environments. A perfect synthesis of quality at your fingertips, easy to select, install and use. Technology and value have never been so accessible.

The new SACE FORMULA DSP family consists of four frames (P1, P2, P3 and P4) reaching up to 160A, 250A, 630A and 800A respectively. The four frames are available with thermal-magnetic trip units to cover the most common AC and DC fields. Availability of most requested accessories guarantees the possibility to fulfill the main applications needs.



Easy to install

Click-in fixing for accessories to guarantee time saving and fast installations.



Simplified selection

Availability of a short list of codes enables simplified product selection and easy ordering.



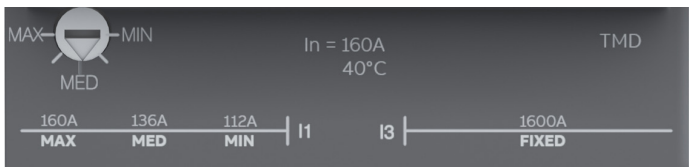
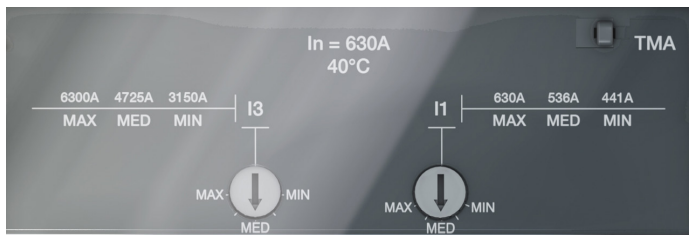
Quality

ABB's long experience in moulded-case circuit breakers design is a guarantee of quality.



Sustainability

Compliance with the international regulations of Product Materials and Environmental Health and Safety.



Power distribution protection

| Field of application | | | | Trip Unit | | L – Overload protection | | | | I – Short-circuit protection | | | |
|-------------------------------|--------|----|----|-----------|------------|-------------------------|-----|------------|-----|------------------------------|---------------------|-----------|-----|
| | | | | | | Current threshold | | Trip time | | Current threshold | | Trip time | |
| Power distribution protection | | | | TMD | Adjustable | Fixed | | Fixed | | Fixed instantaneous | Fixed instantaneous | | |
| | | | | TMA | Adjustable | Fixed | | Adjustable | | Fixed instantaneous | | | |
| | | | | | | | | | | | | | |
| | In [A] | 40 | 63 | 80 | 100 | 125 | 160 | 200 | 250 | 320 | 400 | 630 | 800 |
| TMD | P1 | ● | ● | ● | ● | ● | ● | | | | | | |
| | P2 | | | | | | | ● | ● | | | | |
| TMA | P3 | | | | | | | | | ● | ● | ● | |
| | P4 | | | | | | | | | | | | ● |

SACE FORMULA DSP P1-P4

Breaking capacity at 415VAC

| | Icu | Ics (Icu) |
|---|------|-----------|
| B | 18kA | 100% |
| C | 25kA | 100% |
| N | 36kA | 100% |
| S | 50kA | 100% |

| TMD/TMA | | B | | C | | N | | S | | |
|---------|-----|-------|---------------|----------|---------------|----------|---------------|----------|---------------|----------|
| Frame | In | Poles | Ordering Code | L.P. (₹) | Ordering Code | L.P. (₹) | Ordering Code | L.P. (₹) | Ordering Code | L.P. (₹) |
| P1 160 | 40 | 3P | 1SDA116207R1 | 8,800 | 1SDA116231R1 | 8,950 | 1SDA116255R1 | 11,900 | | |
| | 63 | | 1SDA116209R1 | | 1SDA116233R1 | | 1SDA116257R1 | | | |
| | 80 | | 1SDA116210R1 | | 1SDA116234R1 | | 1SDA116258R1 | | | |
| | 100 | | 1SDA116211R1 | | 1SDA116235R1 | | 1SDA116259R1 | | | |
| | 125 | | 1SDA116212R1 | 11,110 | 1SDA116236R1 | 13,000 | 1SDA116260R1 | 13,430 | | |
| | 160 | | 1SDA116213R1 | 12,700 | 1SDA116237R1 | 16,860 | 1SDA116261R1 | 17,890 | | |
| P2 250 | 200 | 3P | | | 1SDA116325R1 | 22,370 | 1SDA116337R1 | 25,820 | | |
| | 250 | | | | 1SDA116326R1 | 26,000 | 1SDA116338R1 | 28,660 | | |
| P3 630 | 320 | | | | | | 1SDA116371R1 | 36,980 | 1SDA116380R1 | 39,780 |
| | 400 | | | | | | 1SDA116372R1 | 36,980 | 1SDA116381R1 | 39,780 |
| | 630 | | | | | | 1SDA116373R1 | 47,980 | 1SDA116382R1 | 50,120 |
| P4 800 | 800 | | | | | | 1SDA116398R1 | 72,810 | 1SDA116401R1 | 81,740 |

| TMD/TMA | | B | C | | N | | S | | | |
|---------|-----|-------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| Frame | In | Poles | Ordering Code | L.P. (₹) | Ordering Code | L.P. (₹) | Ordering Code | L.P. (₹) | Ordering Code | L.P. (₹) |
| P1 160 | 40 | 4P | 1SDA116218R1 | 11,640 | 1SDA116242R1 | 12,470 | 1SDA116266R1 | 14,960 | | |
| | 63 | | 1SDA116220R1 | | 1SDA116244R1 | | 1SDA116268R1 | | | |
| | 80 | | 1SDA116221R1 | | 1SDA116245R1 | | 1SDA116269R1 | | | |
| | 100 | | 1SDA116222R1 | | 1SDA116246R1 | | 1SDA116270R1 | | | |
| | 125 | | 1SDA116225R1 | 13,650 | 1SDA116249R1 | 16,150 | 1SDA116273R1 | 17,280 | | |
| | 160 | | 1SDA116226R1 | 17,350 | 1SDA116250R1 | 20,630 | 1SDA116274R1 | 21,690 | | |
| P2 250 | 200 | 4P | | | 1SDA116333R1 | 27,980 | 1SDA116345R1 | 31,760 | | |
| | 250 | | | | 1SDA116334R1 | 31,720 | 1SDA116346R1 | 34,740 | | |
| P3 630 | 320 | | | | | | 1SDA116377R1 | 46,010 | 1SDA116386R1 | 49,910 |
| | 400 | | | | | | 1SDA116378R1 | 46,010 | 1SDA116387R1 | 49,910 |
| | 630 | | | | | | 1SDA116379R1 | 59,100 | 1SDA116388R1 | 65,760 |
| P4 800 | 800 | | | | | | 1SDA116400R1 | 78,580 | 1SDA116403R1 | 92,370 |

SACE FORMULA DSP P1-P4



| Terminals (supplied with phase barrier) | | | | | |
|---|---|-----------------------------|--------------|-----------------------------|--------------|
| Size | Type | 6 pcs (kit for 3p) | L.P (₹) | 8 pcs (kit for 4p) | L.P (₹) |
| P1 | ES Extended spread front terminals 47mm | 1SDA116501R1 | 1,900 | 1SDA116502R1 | 2,540 |
| P2 | ES Extended spread front terminals 70mm | 1SDA116505R1 | 2,590 | 1SDA116506R1 | 3,310 |
| P3 | ES Extended spread front terminals 80mm | 1SDA116509R1 | 5,120 | 1SDA116510R1 | 6,810 |
| P4 | ES Extended spread front terminals 70mm | 1SDA104736R1 ⁽¹⁾ | Upon Request | 1SDA104737R1 ⁽²⁾ | Upon Request |

(1) Code is for 3 pcs for both sides order 2 quantities

(2) Code is for 4 pcs for both sides order 2 quantities

| Auxiliary contacts - AUX | | | | | |
|--------------------------|-------------|--------------|---------|--------------|---------|
| Size | Type | 24V DC | L.P (₹) | 250V AC | L.P (₹) |
| P1-P4 | AUX Q or SY | 1SDA116439R1 | 1,860 | 1SDA116440R1 | 1,190 |

| Service releases | | | | | |
|------------------|-------------------------------|--------------|---------|--------------|---------|
| Size | Voltages | SOR | L.P (₹) | UVR | L.P (₹) |
| P1-P2 | 24-30V AC/DC | 1SDA116448R1 | 2,630 | 1SDA116454R1 | 4,170 |
| | 110...127V AC / 110...125V DC | 1SDA116445R1 | 2,460 | 1SDA116452R1 | 4,060 |
| | 220...240V AC / 220...250V DC | 1SDA116447R1 | 2,460 | 1SDA116453R1 | |
| | UVR 380-440V AC | | | 1SDA116455R1 | |
| P3-P4 | 24...30 VAC/DC | 1SDA116461R1 | 3,930 | 1SDA116467R1 | 8,620 |
| | 110...127 VAC - 110...125 VDC | 1SDA116459R1 | 3,930 | 1SDA116464R1 | |
| | 220...240 VAC - 220...250 VDC | | | 1SDA116466R1 | |
| | 380...440 VAC | | | 1SDA116468R1 | |

| Rotary handles | | | | | |
|----------------|---------------|--------------|---------|--------------|---------|
| Size | Type | RHD | L.P (₹) | RHE | L.P (₹) |
| P1-P2 | Rotary Handle | 1SDA116477R1 | 1,920 | 1SDA116483R1 | 1,870 |
| P3 | Rotary Handle | 1SDA116478R1 | 4,330 | 1SDA116485R1 | 3,970 |
| P4 | Rotary Handle | 1SDA116480R1 | 5,910 | 1SDA116488R1 | 7,750 |

| Locking arrangement - Padlock / Keylock | | | | | |
|---|---------------------|--------------|---------|--------------|---------|
| Size | Type | Padlock | L.P (₹) | Keylock* | L.P (₹) |
| P1-P2 | Locking arrangement | 1SDA116491R1 | 1,830 | 1SDA066617R1 | 2,470 |
| P3 | Locking arrangement | 1SDA116493R1 | 3,340 | 1SDA105081R1 | 4,750 |
| P4 | Locking arrangement | 1SDA116495R1 | 4,600 | 1SDA105091R1 | |

* Keylock mounted on mechanism of RHE on MCCB or on RHD

General conditions of sale

General terms and conditions of sale:

- All prices mentioned in this price list are in Indian Rupees (INR) and this supersedes all previous price lists
- Prices are based on Ex-work basis
- List prices (LPs) mentioned are exclusive of all taxes
- Prices are subject to revision without prior notice

Terms of delivery: Ex- work, Nelamangala or any other ABB warehouse in India

Standard delivery terms

Ex-stock or 30 working days

Address of Nelamangala warehouse

ABB INDIA LIMITED

#126, Hanchipura Village, Kasaba Hobli
Nelamangala Taluk, Bangalore-562 123
Tel: +91 80 2770 0081
Tel: +91 80 2770 0082
Tel: +91 80 2770 0083

Address of Works

Nelamangala

Survey No: 88/3, 88/4, Basavanahalli, Kasaba Hobli,
Nelamangala Taluk, Bangalore - 562 123
Karnataka, India
Tel: +91 80 2294 6618
Tel: +91 80 2294 6619
Fax: +91 80 2294 9999

Warranty policy

ABB guarantees the supply according to the law. Upon expiration, the warranty expires even if the devices have not been operated for any reason. In the case of faults, as long as this does not depend on assembly errors by the customer or third parties, on incorrect use of the materials, lack of or incorrect maintenance, normal wear and tear, faults caused by inexperience or negligence by the purchaser or by transport, by the improper storage of the materials, or failure by the customer to adopt measures to reduce eventual dysfunction, overload with respect to the contractual limits, by unauthorized intervention, by tampering or action effected by the customer, to force majeure, ABB will, throughout the warranty period, repair or replace any defective part of supply free of charge, in the shortest possible time, at its premises. Where the repair cannot be executed at ABB premises, except as otherwise agreed, all the supplementary or relevant expenses shall be borne by the customer.

Repair or replacement will be executed only if the customer has performed all the obligations to that date. The customer may not suspend performance of the obligations in any case in which this warranty is invoked. The term for the repair or replacement of the faulty supply will be agreed by ABB and the customer. The shipment of any supply claimed to be faulty by the customer to ABB and subsequently by ABB to the customer, shall be at the risk and under the responsibility of the customer, who shall arrange adequate insurance coverage. The supply repaired or replaced is shipped at the expense and risk of the customer. Any dispute about a shipment has no effect on the remainder of the supply. The products replaced by ABB become the property of ABB.

Any claim regarding the supply, machinery, plant or components not compliant with the specifications or the contractual documentation must be raised in writing, within a maximum term of 8 days from delivery, when the time limit for action expires. In the case of systems, this term is 60 days from execution of the disputed service when the time limit for action expires.

In the case of latent defects, the terms indicated above run from the date of discovery. Once the warranty period has expired, claims are not accepted, even for latent defect. Where the claim is timely and justified, ABB's obligation is limited to replacement of the goods found not in compliance or repetition of execution of the non-compliant service, excluding all rights to the Customer to seek termination of the contract and/or compensation of damages.

With reference to the provision of spare parts, ABB reserves the right to provide materials either from the original supplier or from equivalent supplier.

Warranty period:

Breakers & switches: The warranty period is 12 months from the date of commissioning or 18 months from the date of ABB's invoice, whichever is earlier.

Liability clause:

The manufacturer shall not be liable for any consequential loss, injury or damages attributable to defect or failure of its products.

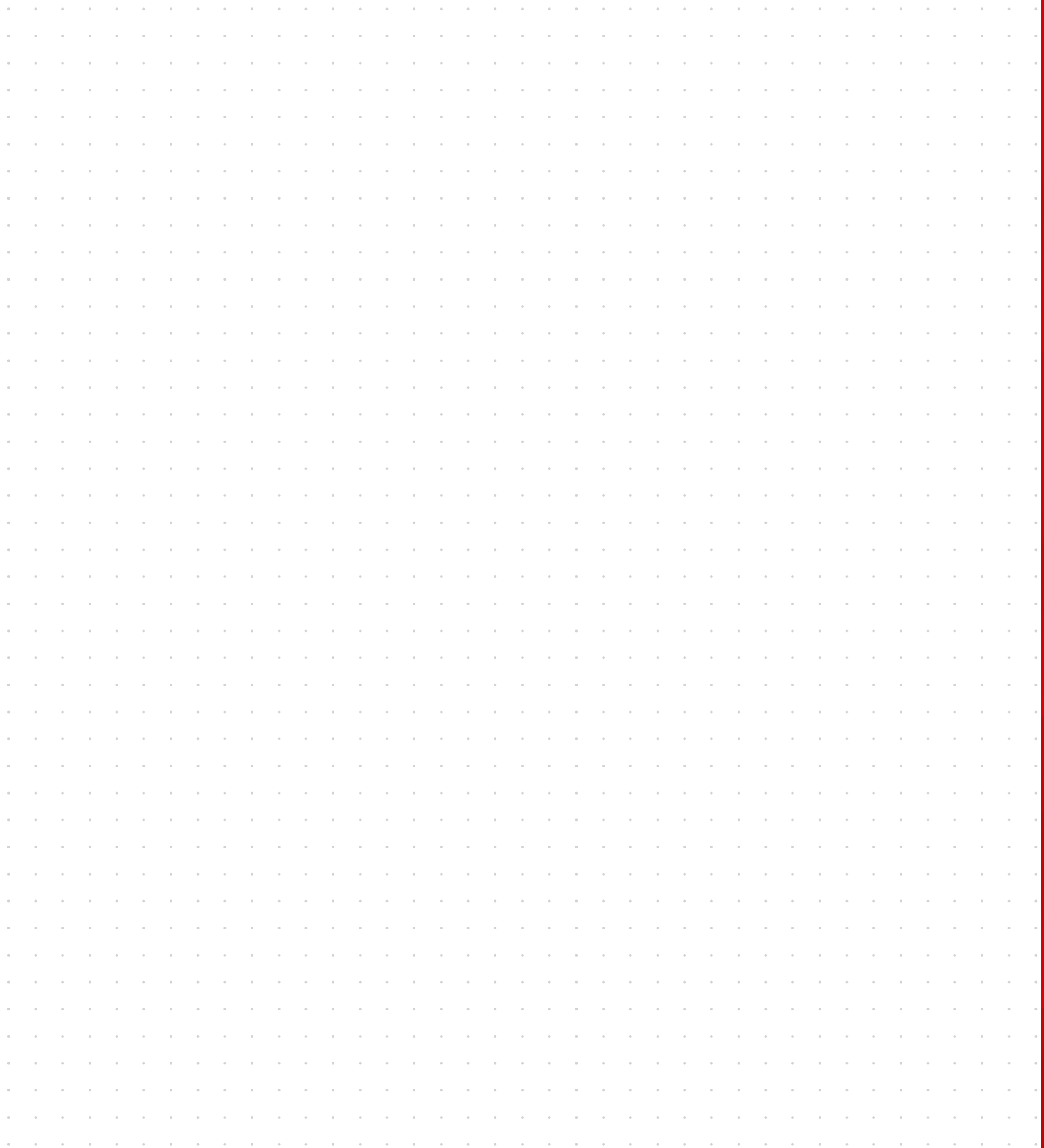


ABB India Helpline

Technical telephone support for customers
and channel partners.

Toll free: (BSNL) +91 1800 420 07 07

website: new.abb.com/low-voltage

