AD60 - MINI CIRCUIT BREAKER

DESCRIPTION / APPLICATION

A circuit breaker is a device designed to protect an electrical circuit or equipment from damage caused by excessive current. Its basic function is to interrupt current flow after a fault is detected. Circuit breakers are rated both by the normal current that they are expected to carry, and the maximum short-circuit current that they can safely interrupt. This latter figure is the ampere breaking / interrupting capacity (AIC) of the breaker.
The AD60 series of circuit breakers conform with IEC 60947 standard.

MAIN TECHNICAL DATA

Electrical Features	Compliance Standard		SANS556-1 IEC60947-2
	Rated current	A	1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63
	Poles		1P, 2P, 3P, 4P*
	Rated AC Volts	V	230V, 400V
	Rated frequency	Hz	50 / 60
	Rated breaking capacity	kA	6KA
Mechanical Features	Thermo-magnetic trip characteristics	Curve	B*, C (white toggle), D* (orange toggle)
	Electrical life expectancy		4,000 operations
	Mechanical life expectancy		10,000 operations
	Protection degree		IP20
	Tested at Ambient temperature	℃	30
Installation	Operating Ambient temperature (with daily average ≤ 35℃)	℃	-30℃ to +60℃
	Terminal connection type		Cable / Pin-type busbar
	Connection		Top and bottom
	Tighten torque (max)	Nm	2.5Nm
	Mounting		DIN Rail EN 60715(35mm) with fast clip device

***** Available on request

SWAN ELECTRIC

PART NUMBER EXAMPLE

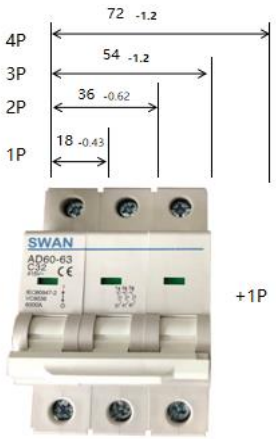
BASE NUMBER	KA RATING	POLES	AMPERAGE	CURVE
CB-AD60	6KA	1P	1A	C / D
EXAMPLE	**CB-AD60-6101**			
	CB-AD60-6101D			

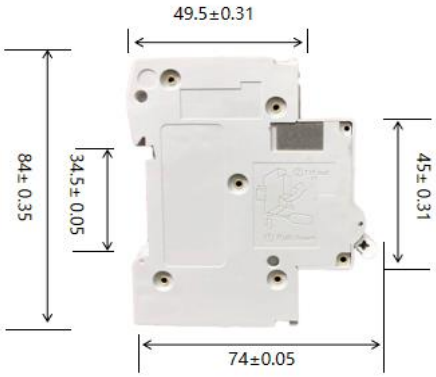
TEMPERATURE DERATING

The maximum permissible current in a circuit breaker depends on the ambient temperature where the circuit breaker is placed. Ambient temperature is the temperature inside the enclosure or switchboard in which the circuit breakers are installed. South Africa is calibrated at 40°C.

RATED CURRENT	TEMPERATURE COMPENSATION RATE CORRESPONDING TO DIFFERENT TEMPERATURES									
	-25C	-15C	-5C	0C	10C	20C	30C	40C	50C	60C
1A	1.26	1.23	1.19	1.15	1.11	1.05	1.00	0.96	0.93	0.88
2A	2.52	2.46	2.38	2.28	2.20	2.08	2.00	1.92	1.86	1.76
3A	3.78	3.69	3.57	3.42	3.30	3.12	3.00	2.88	2.79	2.64
4A	5.04	4.92	4.76	4.56	4.40	4.16	4.00	3.84	3.76	3.52
6A	7.56	7.38	7.14	6.84	6.60	6.24	6.00	5.76	5.64	5.28
10A	12.7	12.50	12.00	11.50	11.10	10.60	10.00	9.60	93.00	8.90
16A	20.48	20.00	19.20	18.40	17.76	16.96	16.00	15.36	14.88	14.24
20A	25.60	25.00	24.00	23.00	22.20	21.20	20.00	19.20	18.60	17.80
25A	32.00	31.25	30.00	28.75	27.75	26.50	25.00	24.00	23.25	22.25
32A	41.28	40.00	38.72	37.12	35.52	33.92	32.00	30.72	29.76	28.16
40A	51.20	50.00	48.00	46.40	44.80	42.40	40.00	38.40	37.20	35.60
50A	65.50	63.00	60.50	58.00	56.00	53.00	50.00	48.00	46.50	44.00
63A	81.90	80.01	76.86	73.71	70.56	66.78	63.00	60.48	58.90	55.44

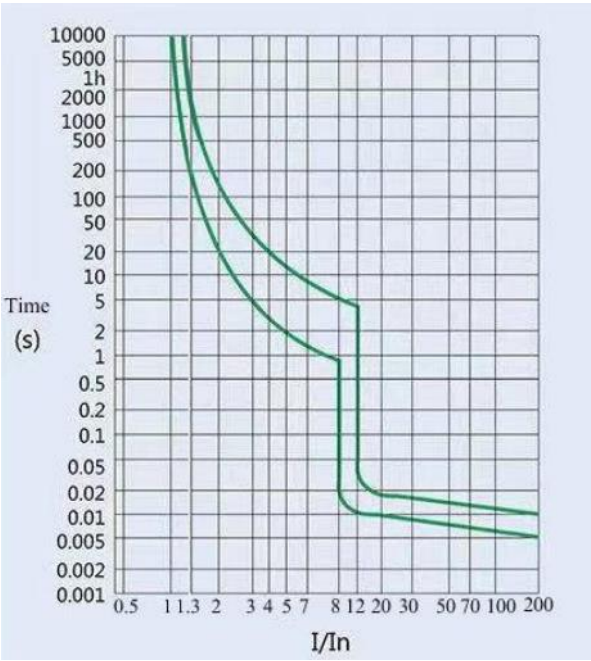
DIMENSIONS AND MOUNTING





TRIPPING CURVES

C Curve



D Curve