

3. GENERAL

3-1. Types and Descriptions

TemPower2 is available in types shown in Tables 3 and 4.

Table 3 Standard types

Frame size (A)	800		1250		1600		2000		2500		3200		4000		4000		
Type	AR208S		AR212S		AR216S		AR220S		AR325S		AR332S		AR440SB		AR440S		
Max. rated current [I_n] (A) *1, *2	IEC, EN, AS		800		1250		1600		2000		2500		3200		4000		
	JIS		800		1250		1600		2000		2500		3200		4000		
	Marine use		800		1250		1600		2000		2500		3200		4000		
N-phase rated current (A)	800		1250		1600		2000		2500		3200		4000		4000		
Number of poles *3, *4	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4	
Dielectric withstand voltage [U] (50/60Hz) *5	1000		1000		1000		1000		1000		1000		1000		1000		
Operating voltage [U_n] (50/60Hz) *6	690		690		690		690		690		690		690		690		
Rated breaking/making current [kA sym rms/kA peak]																	
IEC, EN, AS [$I_{cs} = I_{cu}$] JIS C 8201-2-1 Ann.1 Ann.2	AC 690V *8		50/105		65/143		85/187		100/220		100/220		100/220		100/220		
	AC 440V		65/143 *10		85/187 *10		100/220 *10		100/220 *10		100/220 *10		100/220 *10		100/220 *10		
NK *7	AC 690V		50/115		65/153		85/201		100/245		100/245		100/245		100/245		
	AC 450V		65/153 *10		85/201 *10		100/245 *10		100/245 *10		100/245 *10		100/245 *10		100/245 *10		
For DC	DC 600V *9		40/40		40/40		40/40		40/40		40/40		40/40		40/40		
	DC 250V		40/40		40/40		40/40		40/40		40/40		40/40		40/40		
Rated short-time current [I_{cw}] [kA rms] (1 sec.)	65		65		85		85		100		100		100		100		
Rated latching current (kA)	65		65		85		85		100		100		100		100		
Endurance in number of ON-OFF cycles *11	Mechanical	With maintenance	30000	30000	30000	25000	20000	20000	15000	15000	8000	8000	8000	8000	8000	8000	
		Without maintenance	15000	15000	15000	12000	10000	10000	8000	8000	8000	8000	8000	8000	8000	8000	
	Electrical	AC 460V	12000	12000	12000	10000	7000	7000	3000	3000	3000	3000	3000	3000	3000	3000	
		AC 690V	10000	10000	10000	7000	5000	5000	2500	2500	2500	2500	2500	2500	2500	2500	
Installation	Draw-out or fixed type																
Mass (kg) for draw-out type	73	86	73	86	76	90	79	94	105	125	105	125	126	158	139	176	
External dimensions (mm)																	
Fixed type *12	a	360	445	360	445	360	445	360	445	466	586	466	586	-	-	-	-
	b	460	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c	290	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Draw-out type *13	a	354	439	354	439	354	439	354	439	460	580	460	580	460	580	631	801
	b	460	-	-	-	-	-	-	-	-	-	-	-	460	580	631	801
	c	345	-	-	-	-	-	-	-	-	-	-	-	345	530	631	801
	d	40	-	-	-	-	-	-	-	-	-	-	-	140	53	53	53
Connection method	Line side	Vertical, horizontal or front terminals												Vertical terminals		Vertical terminals	
	Load side	Vertical, horizontal or front terminals												Vertical terminals		Vertical terminals	
Control circuit terminal type	screw terminals																
Spring charging method	Manual or motor charging																
Overcurrent release (OCR)	No OCR, or L-characteristic for general feeder protection																
Operation indication	Group indication																
Tripping device	Tripping coil (TC)	Standard equipment for OCR-equipped ACB															
	Shunt trip device (SHT)	Optional															
	undervoltage trip device (UVT)	Optional															
Auxiliary switches	Number of switches	4C (standard), 7C or 10C; available for general feeder or microload															
	Terminal type	screw terminals															
Rated voltage	Operation power AC100 - 120V, AC200 - 240V, DC100 - 125V, DC200 - 250V, DC24V or DC48V																

*1: Ambient temperature: 40°C (45°C for marine used))

*2: With horizontal terminals for AR208S - 216S and vertical terminals for AR220S - 440S

*3: For 2-pole applications, use two poles at both ends.

*4: 4-pole ACBs are not applicable to power distribution IT systems unless N-phase protection is provided.

*5: Varies depending on applicable standards. AC1000V applies to ACBs conforming to IEC60947-2 and JIS C8201-2.

*6: Varies depending on applicable standards. AC690V applies to ACBs conforming to IEC60947-2 and JIS C8201-2.

*7: Applicable to 3-pole ACBs with INST or MCR.

*8: For applicability to power distribution IT systems, consult us

*9: Applicable under 3-pole serial connection scheme.

*10: For AC500V

*11: Expected service life based on endurance test. The service life of ACB depends on the working and environmental conditions. Refer to chapter 6 "Maintenance, Inspection and Parts Replacement".

*12: For both vertical and horizontal terminals

*13: This manual covers draw-out type ACBs.

*14: In applying or going to apply.