

DATA SHEET: TEMPOWER2 ACB

Types: AR208S, AR212S, AR216S, AR220S,

Electrical Characteristics to IEC 609847-1, IEC 60947-2

Type		AR208S	AR212S	AR216S	AR220S
Series		Standard	Standard	Standard	Standard
AMPERE RATING(A)		800	1250	1600	2000
RATED CURRENT (max) [I_n](A)	JIS ⑫, IEC, EN, AS	800	1250	1600	2000
① ②	NEMA, ANSI	800	1250	1540	2000
	Marine	800	1250	1600	2000
NEUTRAL POLE AMPERES FRAME (A)		800	1250	1600	2000
NUMBER OF POLES ③ ④		3 4	3 4	3 4	3 4
RATED PRIMARY CURRENT OF OVER-CURRENT RELEASE [I_{CT}](A)		200	400	400	400
• for general feeder circuit use		400	800	800	800
		800	1250	1250	1250
				1600	1600
					2000
RATED CURRENT OF OVER-CURRENT RELEASE(A)		$100 \leq I_n \leq 200$	$200 \leq I_n \leq 400$	$200 \leq I_n \leq 400$	$200 \leq I_n \leq 400$
• for generator protection use		$200 < I_n \leq 400$	$400 < I_n \leq 800$	$400 < I_n \leq 800$	$400 < I_n \leq 800$
[I_n] is generator rated current.		$400 < I_n \leq 800$	$630 < I_n \leq 1250$	$630 < I_n \leq 1250$	$630 < I_n \leq 1250$
				$800 < I_n \leq 1600$	$800 < I_n \leq 1600$
					$1000 < I_n \leq 2000$
AC RATED INSULATION VOLTAGE [U_i](V. 50/60Hz)		1000	1000	1000	1000
RATED OPERATIONAL VOLTAGE [U_e](V. 50/60Hz)		690	690	690	690
AC RATED BREAKING CAP [kA sym rms]/MAKING CAP [kA peak]					
JIS ⑫, IEC, EN, AS	AC 690V ⑤	50/105	50/105	50/105	50/105
[$I_{CS} = I_{CU}$]	440V	65/143 ⑥	65/143 ⑥	65/143 ⑥	65/143 ⑥
NEMA	AC 635V	42/96.6	42/96.6	42/96.6	42/96.6
ANSI	508V	50/115	50/115	50/115	50/115
	254V	65/149.5	65/149.5	65/149.5	65/149.5
⑦	DC 600V ⑧	40/40	40/40	40/40	40/40
	250V	40/40	40/40	40/40	40/40
NK ⑨	AC 690V	50/115	50/115	50/115	50/115
	450V	65/153 ⑥	65/153 ⑥	65/153 ⑥	65/153 ⑥
LR, AB, ⑨	AC 690V	50/115	50/115	50/115	50/115
GL, BV	450V	65/153 ⑥	65/153 ⑥	65/153 ⑥	65/153 ⑥
RATED IMPULSE WITHSTAND VOLTAGE [U_{imp}](kV)		12	12	12	12
RATED SHORT TIME WITHSTAND	1s	65	65	65	65
CURRENT [I_{cw}](kA rms)	3s	50	50	50	50
LATCHING CURRENT (kA)		65	65	65	65
TOTAL BREAKING TIME (s)		0.03	0.03	0.03	0.03
CLOSING OPERATION TIME					
SPRING CHARGING TIME (s) max.		10	10	10	10
CLOSE TIME (s) max.		0.08	0.08	0.08	0.08
No. of operating cycles					
Mechanical life	with maintenance	30000	30000	30000	25000
	without maintenance	15000	15000	15000	12000
Electrical life	without maintenance AC460V	12000	12000	12000	10000
	AC690V	10000	10000	10000	7000
Draw-Out Body (kg)	⑪	45 51	45 51	46 52	46 52
Draw-Out Chassis (kg)	⑪	28 35	28 35	30 38	33 42
Total Draw-Out Weight (kg)	⑪	73 86	73 86	76 90	79 94
Fixed (kg)	⑪	53 59	53 59	54 60	54 60
OUTLINE DIMENSION (mm)					
FIXED TYPE					
	a	360 445	360 445	360 445	360 445
	b	460	460	460	460
	c	290	290	290	290
	d	75	75	75	75
DRAW-OUT TYPE ! 0					
	a	354 439	354 439	354 439	354 439
	b	460	460	460	460
	c	345	345	345	345
	d	40	40	40	40

① : Values in open air at 40°C (45°C for marine applications).

② : Values of AR208S, AR212S, AR216S for draw-out type with horizontal terminals, Values of the other ACBs for draw-out type with vertical terminals.

③ : For 2 pole ACBs use outside poles of 3 pole ACB.

④ : 4poles ACBs without Neutral phases protection can not apply IT earthing system.

⑤ : Contact TERASAKI for the details.

⑥ : For 500V AC.

⑦ : ARG OCRs can not be used for DC. Please contact TERASAKI for DC application.

⑧ : A special version of the ACB is required above 250V DC. Contact Terasaki for details.

⑨ : Applicable to only 3 pole ACBs.

⑩ : For vertical terminals or horizontal terminals.

⑪ : These weights are based on normal specifications with the OCR and standard accessories

⑫ : Comply with JIS C 8201-2-1 Ann.1 Ann.2

⑬ : Being or will be applied.

⑭ : Values for ACBs with INST. 100/220kA for ACBs with MCR.

: Contact TERASAKI for the ratings.

Note: When the INST trip function is set to NON, the MCR function should be enabled, otherwise, the rated breaking capacity is reduced to the rated latching current.

DATA SHEET: TEMPOWER2 ACB

Types: AR208S, AR212S, AR216S, AR220S,

L-characteristic for general feeder circuits (Type AGR-11BL, 21BL, 31BL)

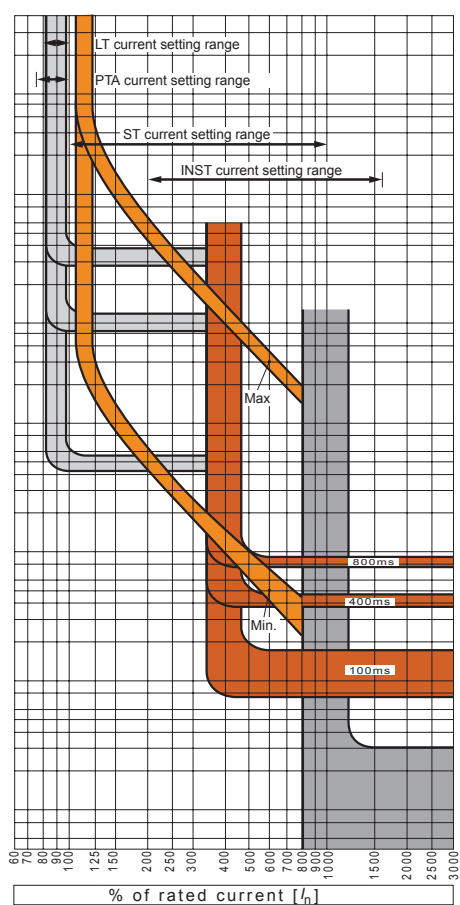
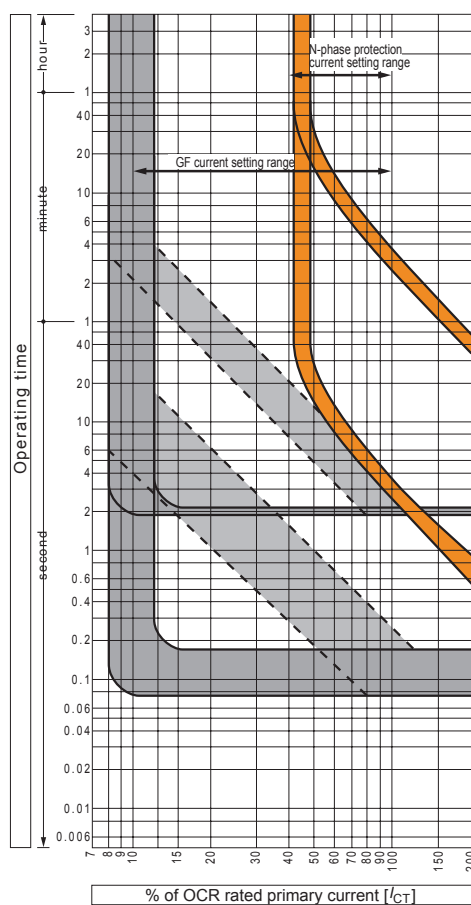
Specifications

Values of $[I_{CT}]$ and $[I_n]$

Type	Applicable $[I_{CT}]$ (A)	Rated current $[I_n]$ (A)			
		$[I_{CT}]$ $\times 0.5$	$[I_{CT}]$ $\times 0.63$	$[I_{CT}]$ $\times 0.8$	$[I_{CT}]$ $\times 1.0$
AR208S	200	100	125	160	200
	400	200	250	320	400
	800	400	500	630	800
AR212S	400	200	250	320	400
	800	400	500	630	800
	1250	630	800	1000	1250
AR216S	400	200	250	320	400
	800	400	500	630	800
	1250	630	800	1000	1250
	1600	800	1000	1250	1600

Type	Applicable $[I_{CT}]$ (A)	Rated current $[I_n]$ (A)			
		$[I_{CT}]$ $\times 0.5$	$[I_{CT}]$ $\times 0.63$	$[I_{CT}]$ $\times 0.8$	$[I_{CT}]$ $\times 1.0$
AR220S	400	200	250	320	400
	800	400	500	630	800
	1250	630	800	1000	1250
	1600	800	1000	1250	1600
	2000	1000	1250	1600	2000

PROTECTION CHARACTERISTICS



The ST trip characteristic shown in the figure applies when the ramp characteristic select switch is in the OFF position.

DATA SHEET: TEMPOWER2 ACB

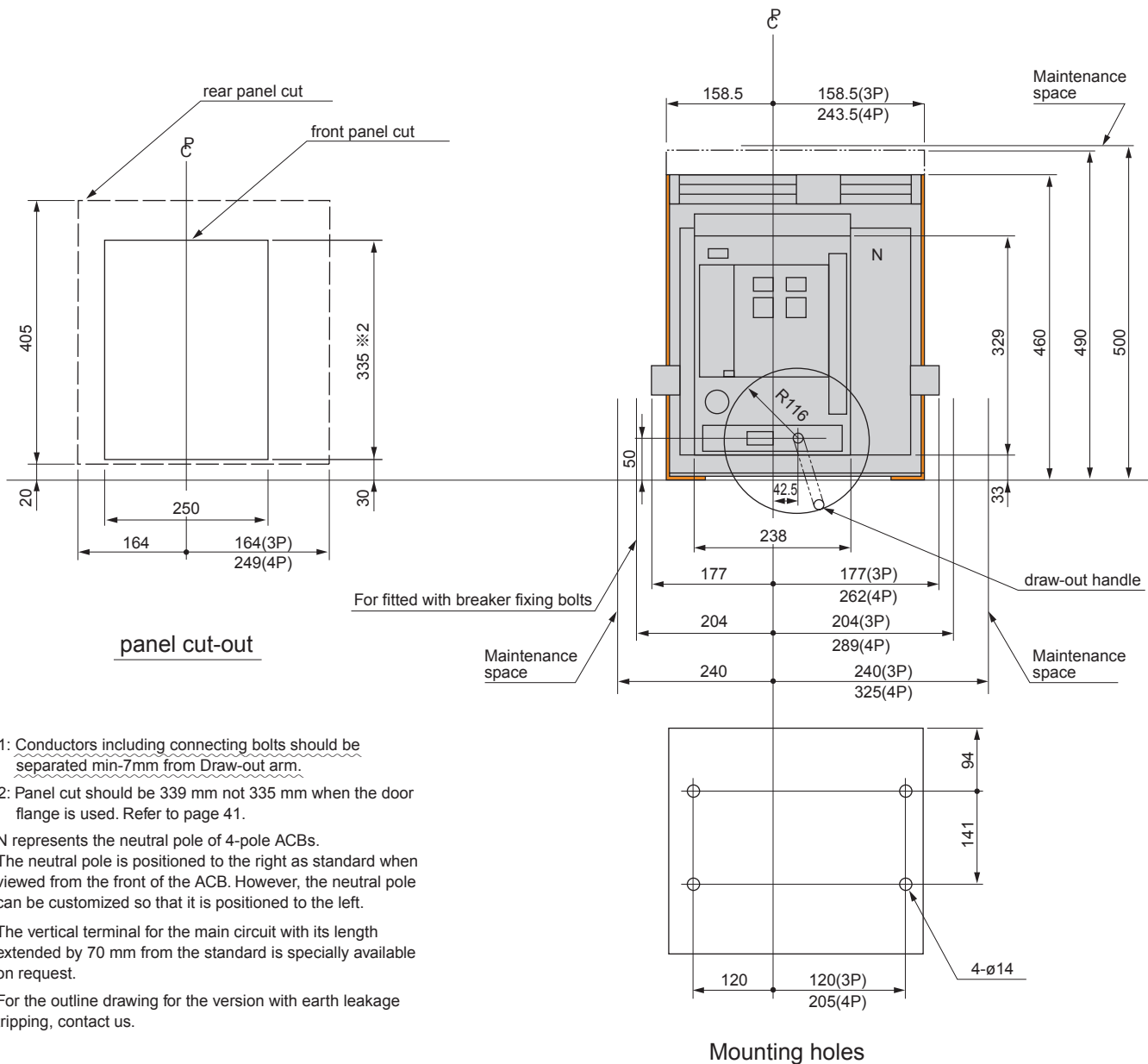
Types: AR208S, AR212S, AR216S, AR220S,

Drawout Type Outline Dimensions

$\mathcal{P}$: ACB Front cover center line

Terminal size

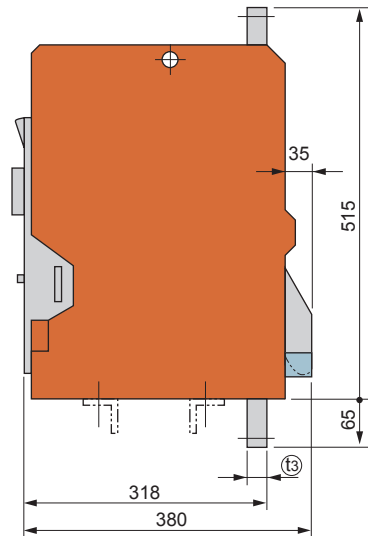
Type	(t ₁)	(t ₂)	(t ₃)	W
AR208S	10	10	15	17.5
AR212S	10	10	15	17.5
AR216S	20	15	25	22.5
AR220S	20	15	25	—



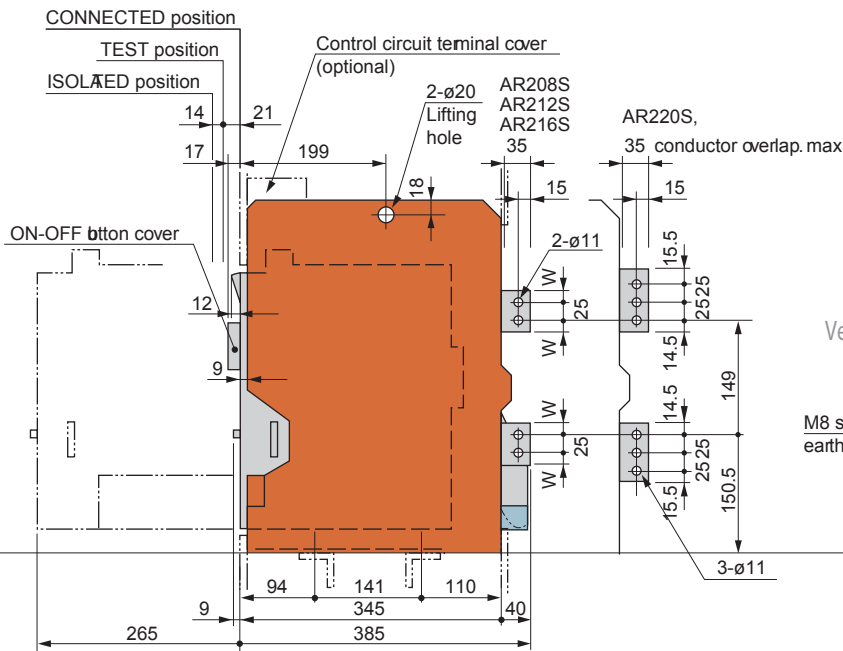
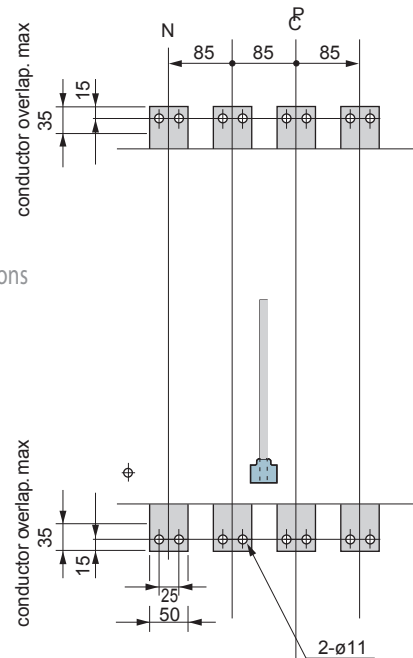
DATA SHEET: TEMPOWER2 ACB

Types: AR208S, AR212S, AR216S, AR220S,

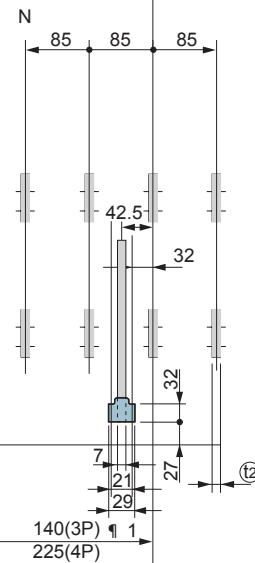
Draw-out Type Outline Dimensions



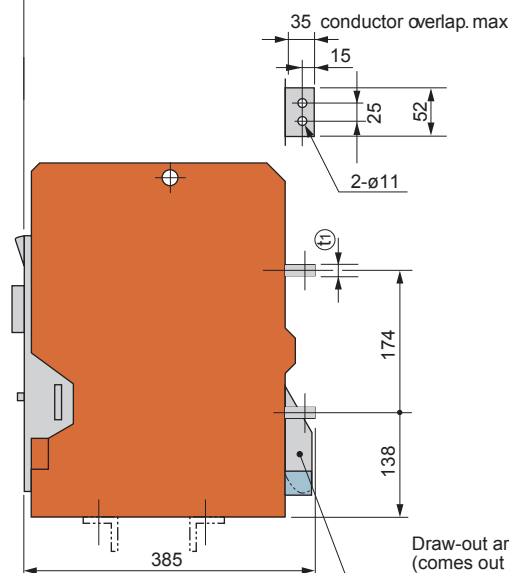
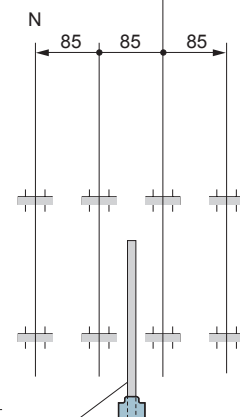
Front connections



Vertical terminals



Horizontal terminals



Draw-out arm
(comes out when breaker is drawn out)

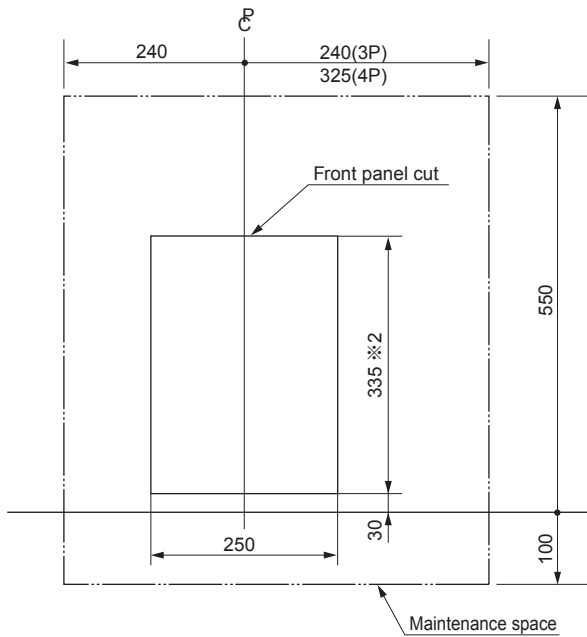
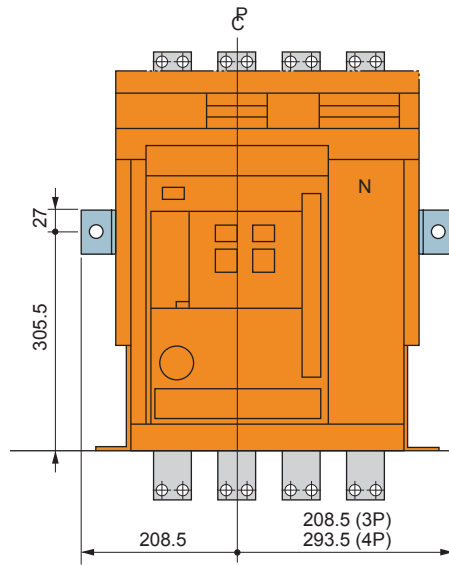
DATA SHEET: TEMPOWER2 ACB

Types: AR208S, AR212S, AR216S, AR220S,



Fixed Type Outline Dimensions

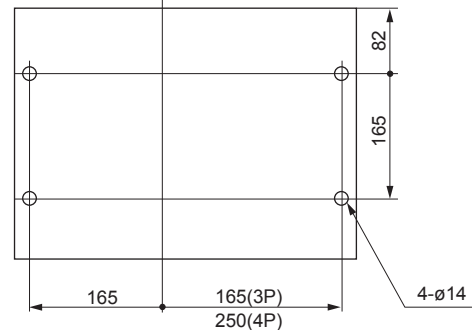
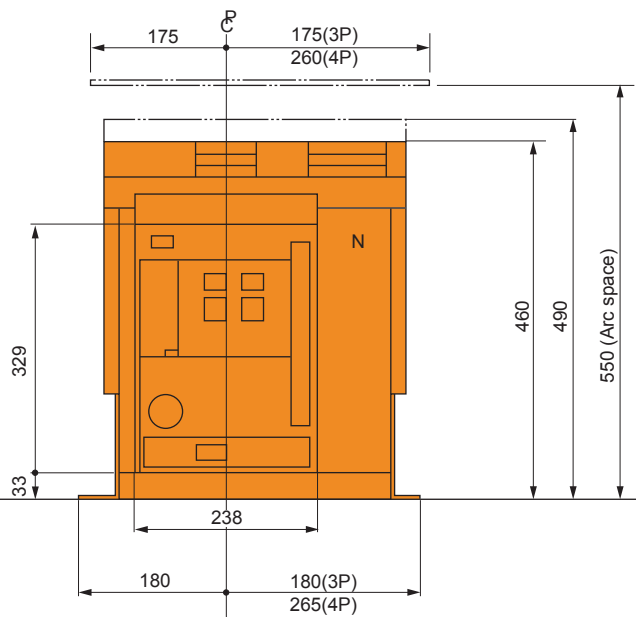
$\overline{P}$: ACB Front cover center line



Panel cutout

Terminal size

Type	(t ₁)	(t ₂)	(t ₃)	W
AR208S	10	10	15	17.5
AR212S	10	10	15	17.5
AR216S	20	15	25	22.5
AR220S	20	15	25	—



Mounting holes

※2: Panel cut should be 339 mm not 335 mm when the door flange is used. Refer to page 41.

- N represents the neutral pole of 4-pole ACBs.
The neutral pole is positioned to the right as standard when viewed from the front of the ACB. However, the neutral pole can be customized so that it is positioned to the left.
- For the outline drawing for the version with earth leakage tripping, contact us.

DATA SHEET: TEMPOWER2 ACB

Types: AR208S, AR212S, AR216S, AR220S,

Fixed Type Outline Dimensions

