PROGRAMMABLE AC POWER SOURCE DP series

Specifications | Single-phase models / polyphase models (1.5 kVA to 36 kVA)

Models/systems

Each item applies to all models unless indicated otherwise.

Single-phase models	DP015S, DP030S, DP045S, DP060S, DP075S, DP090S, DP105S, DP120S, DP240S, DP360S
Single-phase three-wire models	DP030D, DP060D, DP090D, DP120D
Three-phase models	DP045T, DP090T
Polyphase systems	Configuration of a single-phase three-wire system with two units of the same single-phase model, or configuration
	of a three-phase system with three units (connected with system cable). Note: In a polyphase system, the specifications of the constituent single-phase models are the specifications for each phase. The system must be configured by same model and same firmware. Please inquire for details about specifications.

- The following settings and conditions are provided unless otherwise noted.
- · Load: resistance load for power factor 1
- · AGC/Auto Cal: OFF
- Signal source: INT (internal signal source)
- Current limiter: factory default setting
- Output voltage waveform: sine wave
- Output terminal: rear panel output terminal block [set] indicates a setting value.

When two values are indicated with a slash, this means that specifications vary depending on the output range. The value before the slash is for 100 V specifications, and the value after the slash is for 200 V specifications.

1P : Single-phase 2-wire 1P3W : Single-phase 3-wire 3P3W : Three-phase 3-wire 3P4W : Three-phase 4-wire

■ AC/DC Mode, Signal Source

	Single-phase models	Single-phase 3-wire models, Three-phase models
AC/DC mode	AC, ACDC, DC	AC, ACDC
Signal source	INT, VCA, SYNC, EXT, ADD	INT, VCA, SYNC

■ Power Output (Single-phase)

Note: When two values are indicated with a slash [/], the value before the slash is specification for 100 V range, the value after the slash is specification for 200 V range.

Мс	del name		DP015S	DP030S	DP045S	DP060S	DP075S	DP090S	DP105S	DP120S	DP240S	DP360S		
	Output power *	2	1.5 kVA	3 kVA	4. 5kVA	6 kVA	7.5 kVA	9 kVA	10.5 kVA	12 kVA	24 kVA	36 kVA		
	Mode		Floating output,	Single-phase 2-wire Floating output, it can be used with grounding of Lo terminal.										
	Rated output v	oltage	100 V/200 V											
	Setting mode			Balanced mode, Unbalanced mode (Only when polyphase system is configured)										
	Voltage setting range	Phase voltage	0.0 V to 160.0 V/0.0 V to 320.0 V, 0.0 Vp-p to 454.0 Vp-p/0.0 Vp-p to 908.0 Vp-p (Arbitrary waveform) For all phases in balanced mode and each phase in unbalanced mode											
		Line voltage			(1P3W), 0.0 V to 2 ave when polyphas									
		Resolution	Phase voltage se	etting: 0.1 V, line v	oltage setting: 0.2	V								
		Accuracy *3	± (0.5% of set +	1.5% of set + 0.6 V/1.2 V)										
Indino	Max. current *4	*5	15 A/7.5 A	30 A/15 A	45 A/22.5 A	60 A/30 A	75A/37.5 A	90 A/45 A	105 A/52.5 A	120 A/60 A	240 A/120 A	360 A/180 A		
<u></u>	Max. peak curr	ent *4 *6	4 times value of	maximum current.	•		•	•			•			
2	Load power fac	ctor range	0 to 1 (lead or la	g, at 45 Hz to 65 H	Iz, external power	injection and reger	neration are not av	ailable.)						
_	Frequency sett	ing range	AC mode : 40 Hz	to 550 Hz, ACDC	mode : 1 Hz to 55	0 Hz								
		Resolution	0.01 Hz											
		Accuracy	£0.01% of setting (23°C±5°C)											
	Frequency stat	oility *7	±0.005%											
	Output wavefor	rm	Sine, arbitrary (1	Sine, arbitrary (16 types), clipped sine (3 types)										
	Output on phas	se *8	0.0 deg. to 359.9 deg. variable (resolution 0.1 deg.)											
	Output off phas	se *8	0.0 deg. to 359.9 deg. variable (resolution 0.1 deg. selectable between active or inactive)											
	Phase angle se	etting range	L2 phase : 0 deg. to 359.9 deg. (1P3W)											
	(unbalanced m	iode)	L2 phase : 0 deg. to 359.9 deg., L3 phase : 0 deg. to 359.9 deg. (3P4W)											
		Resolution	0.1 deg.											
		Accuracy *9	5. 45 Hz to 65 Hz : ±1.0 deg., 40 Hz to 550 Hz : ±2.0 deg.											
	DC offset *10		Within ±20 mV (t	typ., fine adjustme	nt available)									
	Output power *	2	1.5 kW	30 kW	4.5 kW	6 kW	7.5 kW	9 kW	10.5 kW	12 kW	24 kW	36 kW		
	Rated output v	oltage	Floating output, i	t can be used with	grounding of Lo te	rminal.		•			•			
	Mode		100 V/200 V											
ž	Rated output v	oltage	-227.0 V to +227	7.0 V/-454.0 V to +	+454.0 V									
DO OUIDUI		Resolution	0.1 V											
2		Accuracy *12	± (1 0.5% of set I	+0.6 V/1.2 V)										
	Max. current *1	3	15 A/7.5 A	30 A/15 A	45 A/22.5 A	60 A/30 A	75 A/37.5 A	90 A/45 A	105 A/52.5 A	120 A/60 A	240 A/120 A	360 A/180 A		
	Max. instantaneous current *14		4 times value of m	naximum current.				•			•			
Output voltage stability (phase voltage)			Fluctuation with	Fluctuation with input voltage *15: within ±0.15% (typ. for DP240S and DP360S) Fluctuation with output current *16: within ±0.15 V/±0.30 V (DC), within ±0.15 V/±0.3 0V (45 Hz to 65 Hz), within ±0.5 V/±1.0 V (40 Hz to 550 Hz) Fluctuation with ambient temperature *17: within ±0.01%/°C										
	tput voltage dist nase voltage)	ortion factor	0.5% or lower (4	0 Hz to 550 Hz, 50	0% or higher of rate	ed output voltage, ı	maximum output ci	urrent or lower, AC	and ACDC modes,	THD+N)				



PROGRAMMABLE AC POWER SOURCE **DP** series

Specifications

Single-phase models / polyphase models (1.5 kVA to 36 kVA)

Power Output (Single-phase 3-wire and Three-phase)

Mode	I name Sing	gle-phase 3-wire	DP030D	DP060D	DP090D	DP120D	_	_							
	Thre	ee-phase	_	_	_	_	DP045T	DP090T							
(Output power	*2	3 kVA	6 kVA	9 kVA	12 kVA	4.5 kVA	9 kVA							
ı	Mode		Single-phase 3-wire Floating output, it can be used with grounding of Lo terminal.												
F	Rated output	voltage	Phase voltage: 100 V/200 V												
	Setting mode		Balanced mode, unbalanced r	node											
	oltage setting ange	Phase voltage		1.0 V to 160.0 V/0.0 V to 320.0 V, 0.0 Vp-p to 454.0 Vp-p/0.0 Vp-p to 908.0 Vp-p (Arbitrary waveform) or all phases in balanced mode and each phase in unbalanced mode											
		Line voltage		0 V to 320.0 V / 0.0 V to 640.0 V 0.0 V to 554.2 V 0.0 V											
		Resolution	Phase voltage setting: 0.1 V,	se voltage setting : 0.1 V, line voltage setting : 0.2 V											
_		Accuracy *3	± (0.5% of set + 0.6 V/1.2 V)												
output *1	Max. current *	4 *5	15 A/7.5 A 30 A/15 A 45 A/22.5 A 60 A/30 A 15 A/7.5 A 3												
를	Max. peak cui	rrent *4 *6	4 times value of maximum cur	rent.											
Q [oad power fa	actor range	0 to 1 (lead or lag, at 45 Hz to 65 Hz, external power injection and regeneration are not available.)												
1	requency se	tting range	AC mode: 40 Hz to 550 Hz, ACDC mode: 1 Hz to 550 Hz												
		Resolution	0.01 Hz												
		Accuracy	±0.01% of setting (23°C±5°C)												
ı	requency sta	ability *7	±0.005%												
(Output wavefo	orm	Sine, arbitrary (16 types), clipped sine (3 types)												
	Output on pha	ase *8	0.0 deg. to 359.9 deg. variable (resolution 0.1 deg.)												
_	Output off pha		0.0 deg. to 359.9 deg. variable	(resolution 0.1 deg. selectab	le between active or inactive)										
	Phase angle s		L2: 180 deg. ±35 deg				L2: 120 deg. ±35 deg, L3: 24	10 deg. ±35 deg							
	unbalanced	Resolution	0.1 deg.												
<u> </u>	mode)	Accuracy *9	45 Hz to 65 Hz : ±1.0 deg., 40	Hz to 550 Hz : ±2.0 deg.											
	DC Offset *10		Within ±20 mV (typ., fine adju												
	ut voltage sta	bility	Fluctuation with input voltage *15 : within ±0.15%												
(pha	se voltage)		Fluctuation with output current *16: within ±0.15 V/±0.30 V (DC), within ±0.15 V/±0.3 0V (45 Hz to 65 Hz), within ±0.5 V/±1.0 V (40 Hz to 550 Hz) Fluctuation with ambient temperature *17: within ±0.01%/°C												
	ut voltage dis se voltage)	tortion factor	0.5% or lower (40 Hz to 550 H	0.5% or lower (40 Hz to 550 Hz, 50% or higher of rated output voltage, maximum output current or lower, AC and ACDC modes, THD+N)											

- *1 : [V] = Vrms, [A] = Arms, unless otherwise specified.
- *2 : In the case that the power input voltage is 1P 170 V or lower, models with 6 kVA or higher have the limit on the power capacity
- *3 : In the case of 10 V to 150 V/20 V to 300 V, sine wave, no load, 45 Hz to 65 Hz, DC voltage setting 0 V, 23°C ±5°C
- *4 : For single-phase 3-wire and three-phase, value is phase current.
 *5 : If the output voltage is higher than the rated value, this is limited (lowered) to satisfy the power capacity. If there is the DC superimposition, the RMS current of AC+DC satisfies the maximum current. In the case of 40 Hz or lower or 400 Hz or higher, and the ambient temperature is 40°C or higher, the maximum current may decrease
- *6 : For the capacitor input type rectified load (crest factor=4), the rated output voltage, and 45 Hz to 65 Hz
- *7 : For 45 Hz to 65 Hz, the rated output voltage, no load and the resistance load for the maximum current,
- and the operating temperature.

 8 : Set for L1 phase, the component of the phase angle setting is added for the other phases.
- *9: In the case of 50 V or higher, sine wave, and same load conditions and voltage setting for all phases.
 *10: In the case of AC mode and 23°C ±5°C
- *11: [V]=Vdc, [A]=Adc, and the polarity is relative to Lo terminal, unless otherwise specified.
- *12: In the case of -212 V to -10 V, +10 V to +212 V/-424 V to -20 V, +20 V to +424 V, no load, AC setting 0 V, 23°C ±5°C.

- *13: If the output voltage is higher than the rated value, this is limited (lowered) to satisfy the power capacity. If there is the AC superimposition, the RMS current of DC+AC satisfies the maximum current. In the case that the ambient temperature is 40°C or higher, the maximum current may decrease.
- *14: Instantaneous = within 2 ms, at the rated output voltage
- *15: In the case of single-phase input, for power input 90 V to 250 V for 1.5 kVA, 3 kVA, and 4.5 kVA models, power input 170 V to 250 V for the 6 kVA or higher models, power input 200 V reference. In the case of three-phase three-wire input, for power input 170 V to 250 V, power input 200 V reference. In the case of three-phase four-wire input, for power input is 323 V to 433 V, power input 380 V reference. The resistance load at maximum current, the rated output voltage, DC or 45 Hz to 65 Hz.
- Transition state immediately after a change of the input power supply voltage is not included.

 *16: In the case that the output current is changed from 0% to 100% of maximum output current. For output voltage 75 V to 150 V/150 V to 300 V, no load reference.
 - However, if the output voltage is higher than the rated value, the maximum current is limited to satisfy the
- *17: For power input 200 V or 380 V, no load, the rated output voltage, DC (only single-phase and single-phase output of the multi-phase model) or 45 Hz to 65 Hz.

Power Input

Model name	Single-phase	DP015S	DP030S	DP045S	DP060S	DP075S	DP090S	DP105S	DP120S	DP240S	DP360S
	Single-phase 3-wire	_	DP030D	_	DP060D	_	DP090D	_	DP120D	_	_
	Three-phase	_	_	DP045T	_	_	DP090T	_	_	_	_
Voltage/Phas	se*18	Overvoltage cate	gory II								
(Specifird on	order)	AC100 V to 230 V±10% (Maximum AC100 V to 230 V±10% (Maximum voltage 250 V), 1P or									/±15% (Maximum
		voltage 250 V), 1P AC200 V to 220 V±15% (Maximum voltage 250 V), 3P3W or voltage 250 V), 3P3W or								voltage 250 V), 3P3W or	
				AC380 V±15% (Maximum voltage 433 V), 3P4W						AC380 V±15% (Maximum voltage	
										433 V), 3P4W	
Frequency		50 Hz ±2 Hz or 6	0 Hz ±2 Hz							,	
Power factor*	19	0.95 or more (typ	., at AC100 V inpu	t), 0.90 or more (t	yp., at AC200 V inp	out)				0.90 or more (typ	.)
Efficiency*19	77% or more (typ., at AC200 V input)									77% or more (typ	.)
Power consumption (Maximum)		2.25 kVA	4.5 kVA	6.75 kVA	9 kVA	11.25 kVA	13.5 kVA	15.75 kVA	18 kVA	36 kVA	54 kVA

^{*18:} In the 6 kVA or higher models, the output capacity is limited to 4.5 kW for the 170 V or lower input.

^{*19:} In the case of AC-INT, the rated output voltage, the resistance load at the maximum current, 45 Hz to 65 Hz output.

PROGRAMMABLE AC POWER SOURCE DP series

Specifications | Single-phase models / polyphase models (1.5 kVA to 36 kVA)

■ Measurement Function

Mod	del name	Single-	phase	DP015S	DP030S	DP045S	DP060S	DP075S	DP090S	DP105S	DP120S	DP240S	DP360S			
	[Single-	phase 3-wire	DP030D	DP060D	DP090D	DP120D	_	_	_	_	_	_			
	[Three-	phase	DP045T	DP090T	_	_		_	_	_	_	_			
Disp	play	N	Normal mode	Displays almost a	Il measured and se	etting values (exce	pt harmonic curren	value)								
		S	Simple mode	Displays three me	asurement values	(except harmonic	current value) enla	ged.								
	RMS value	F	ull scale	Phase voltage: 25	0.0 V/500.0 V; Line	e voltage: 500.0 V/	1000.0 V (single-ph	ase three-wire); 43	3.0 V/866.0 V (thre	ee-phase)						
*20		F	Resolution	0.1 V												
je *	DC average (ull scale	±250.0 V/±500.0 \												
Voltage *	(only single ph		Resolution	M V												
>	Peak value	<u> </u>	ull scale	±250.0 V/±500.0 \	/											
	(pk)		Resolution	0.1 V												
	RMS value	F	ull scale	20 A/10 A	40 A/20 A	60 A/30 A	80 A/40 A	100 A/50 A	120 A/60 A	140 A/70 A	160 A/80 A	320 A/160 A	480 A/240 A			
		_	Resolution	0.01 A								0.1 A				
Current *21	DC average(±20 A/±10 A	±40 A/±20 A	±60 A/±30 A	±80 A/±40 A	±100 A/±50 A	±120 A/±60 A	±140 A/±70 A	±160 A/±80 A	±320 A/±160 A	±480 A/±240 A			
ren	(only single ph	_		0.01 A								0.1 A				
J.	Peak value	(pk) F	ull scale	±80 A/±40 A	±160 A/±80 A	±240 A/±120 A	±320 A/±160 A	±400 A/±200 A	±480 A/±240 A	±560 A/±280 A	±640 A/±320 A	±1280 A/±640 A	±1920 A/±960 A			
	Max/Min		Resolution	0.1 A 0.1 A												
	individual disp		Hold			and I min I with the	polarity (with the	clear function)								
	Active (W)		ull scale	1800 W	3600 W	5400 W	7200 W	9000 W	10800 W	12600 W	14400 W	28800 W	43200 W			
ы			Resolution	0.1 W/1 W (1000 V	<u> </u>							1 W				
Power *22	Apparent (\	· -	ull scale	2250 VA	4500 VA	6750 VA	9000 VA	11250 VA	13500 VA	15750 VA	18000 VA	36000 VA	54000 VA			
00M	*23	_	Resolution	0.1 VA/1 VA(1000 VA or higher) 1 VA												
"	Reactive (v	, –	ull scale	2250 var	4500 var	6750 var	9000 var	11250 var	13500 var	15750 var	18000 var	36000 var	54000 var			
	*23	F	Resolution	0.1 var/1 var (1000	var or higher)							1 var				
	d power fac		Range	0.00 to 1.00												
*23		-	Resolution	0.01												
Loa	d crest facto		Range	0.00 to 50.00												
			Resolution	0.01												
, ,	chronization		Range	38.0 Hz to 525.0 H	łz											
<u>-</u>	uency	-		0.1 Hz												
	monic curre	⊢	Range	Up to 40th order.												
*24			ull scale (RMS)	20 A/10 A	40 A/20 A	60 A/30 A	80 A/40 A	100 A/50 A	120 A/60 A	140 A/70 A	160 A/80 A	320 A/160 A	480 A/240 A			
			ull scale (%)	100%												
		_	Resolution	0.01 A or 0.1%								0.1 A or 0.1%				
CO ₂ emissions Contents Instantaneous (kg-CO ₂ /h), integration (t-CO ₂) value for internal loss or output power. CO ₂ emissions coefficient (t-CO ₂ /kWh): variable (resolution: 0.000001)							_									

^{*20:} For phase voltage in the polyphase model.

- 221 : In the case that output current is 5% to 100% of maximum current. For phase current in the polyphase model.
 222 : In the case of sine wave, 50 V or higher output voltage, and that output current is 10% or higher of maximum current.
 233 : Excluding DC mode
 244 : AC-INT mode, fundamental wave 50 Hz/60 Hz only, phase current. This measurement does not conform to IEC or other standards.

■ Current Limiter

Model	name S	name Single-phase		DP015S	DP030S	DP045S	DP060S	DP075S	DP090S	DP105S	DP120S	DP240S	DP360S
	S	Single-phase 3	wire	DP030D	DP060D	DP090D	DP120D	_	_	_	_	_	
	T	hree-phase		DP045T	DP090T	_	_	_	_		_	_	
	Positive	Setting r	nge	+7.5A to +63.0A/	+15.0A to +126.0A/	+22.5A to +189.0A/	+30.0A to +252.0A/	+37.5A to +315.0A/	+45.0A to +378.0A/	+52.5A to +441.0A/	+60.0A to +504.0A/	+120.0A to +1008.0A/	+180.0A to +1512.0A/
ŧ	curren	(peak va	ne)	+3.7A to +31.5A	+7.5A to +63.0A	+11.2A to +94.5A	+15.0A to +126.0A	+18.7A to +157.5A	+22.5A to +189.0A	+26.2A to +220.5A	+30.0A to +252.0A	+60.0A to +504.0A	+90.0A to +756.0A
current	Negative	Setting r	nge	-63.0A to -7.5A/	-126.0A to -15.0A/	-189.0A to -22.5A/	-252.0A to -30.0A/	-315.0A to -37.5A/	-378.0A to -45.0A/	-441.0A to -52.5A/	-504.0A to -60.0A/	-1008.0A to -120.0A/	-1512.0A to -180.0A/
쓪 듣	current	(peak va	ne)	-31.5A to -3.7A	-63.0A to -7.5A	-94.5A to -11.2A	-126.0A to -15.0A	-157.5A to -18.7A	-189.0A to -22.5A	-220.5A to -26.2A	-252.0A to -30.0A	-504.0A to -60.0A	-756.0A to -90.0A
Pe	Resolution	n		D1A									
	Limiter of	peration		Automatic recove	ery (continuous) or	output turn-off whe	n the limited state	continues over the	specified time (1 s	to 10 s, resolution	ls)		
Ħ	Setting r	ange (RMS)		0.8A to 15.8A/	1.5A to 31.5A/	2.3A to 47.3A/	3.0A to 63.0A/	3.8A to 78.8A/	4.5A to 94.5A/	5.3A to 110.3A/	6.0A to 126.0A/	12.0A to 252.0A/	18.0A to 378.0A/
S current limiter				0.8A to 7.9A	1.5A to 15.8A	2.3A to 23.7A	3.0A to 31.5A	3.8A to 39.4A	4.5A to 47.3A	5.3A to 55.2A	6.0A to 63.0A	12.0A to 126.0A	18.0A to 189.0A
MSo	Resolution	n		0.1A									
8	Limiter o	peration		Automatic recove	ery (continuous) or	output turn-off whe	n the limited state	continues over the	specified time (1 s	to 10 s, resolution	s)		

Note: If you increased or decreased the number of units by the power unit energization setting, the factory default setting corresponding to the capacity is used.

■ Power Unit Energization Setting

	_		•								
Model name	Single-phase	DP015S	DP030S	DP045S	DP060S	DP075S	DP090S	DP105S	DP120S	DP240S	DP360S
	Single-phase 3-wire	DP030D	DP060D	DP090D	DP120D	_	_	_	_	_	_
	Three-phase	DP045T	DP090T	_	_	_	_	_	_	_	_
Number of un	Number of units		2	3	4	5	6	7	8	8	8
Energizing setting*25 No		No	Yes								

^{*25 :} Can be set for only a model with more than one unit.

Specifications

Single-phase models / polyphase models (1.5 kVA to 36 kVA)

■Sequence Function

Number of memories	5 (nonvolatile)
Number of steps	255 max. (for each sequence)
Setting range of step time	0.0010 s to 999.9999 s
Operation within step	Constant, keep, linear sweep
Parameters	Output range, AC/DC mode, AC phase voltage, frequency, waveform,
	DC voltage, start phase, stop phase, phase angle, step termination,
	jump count (1 to 9999, or infinite), specification of the jump-to step,
	synchronous step output (2 bit), specification of the branch step,
	trigger output
Sequence control	Start, stop, hold, resume, branch 1, branch 2
Others	Sequence function works with AC-INT, ACDC-INT and DC-INT.
	2) AC voltage, frequency, waveform, start phase and stop phase cannot
	be set with DC-INT.
	Phase angle setting is only for the polyphase system.
	Also, the start phase and the stop phase are set for L1 phase and the
	setting value is added to each phase angle of L2 and L3 phase.

■Simulation

Number of memories	5 (nonvolatile).
Number of steps	6 (initial, normal 1, transition 1, abnormal, transition 2, normal 2).
Step time setting range	0.0010 s to 999.9999 s (0 s can be set for transition steps only).
Operation within step	Constant, keep, linear sweep
Parameters	Output range, AC voltage, frequency, waveform (sine wave only),
	start phase (excluding transition steps), stop phase (excluding
	transition steps), synchronous step (2 bit), trigger output, repeat
	count (1-9999 times or infinite).
Simulation control	Start, stop.
Others	In simulation function, only AC and sine wave, fixed for
	ACDC-INT.

■Control Software

	Remote control	Parameter setting, saving, loading, and others.
S	Status monitor	Monitors and displays status of connected equipment.
Ę.	Logging	Reads and saves measured values.
Functions	Arbitrary waveform	Waveform creation and edit, transfer, display and file operations
ш	Sequence simulation	Sequence data creation, edit, save, transfer, preview, execution control,
		monitor/display during execution, and others.
	CPU	300 MHz min. (1.6 GHz min. recommended)
=	Memory	128 MB or more. (512 MB min. recommended)
Environment	Free hard disk space	64 MB or more.
200	Display	1024 x 768 pixels or more, and 256 colors or more
<u> </u>	OS	Windows 7 / 8.1 / 10 (32 bit / 64 bit) (Microsoft)
ш	Disk drive	CD-ROM drive
	Interface	USB 1.1 full-speed

Other Functions

Setting	V	oltage (RMS)	Phase voltage, line to line voltage (1P3W, 3P4W)					
limitation	_	requency	Upper limit or lower limit.					
Remote		. ,	Voltage detection point is output terminal or sensing input terminal.					
		9	(switchable)					
AGC			Function for continuously performing automatic correction so that the RMS					
/			value of the detection point is equal to the voltage setting value.					
			Response time less than 100 ms (typ.) (At DC/50 Hz/60 Hz, rated output					
			voltage)					
Autocal			When the Autocal is on, the detection point is always measured.					
(Automat	ic ca	libration)	and the output voltage is continuously corrected so that its RMS value is					
(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			equal to the output setting value.					
Clipped	Nun	nber of memories	· · · ·					
sine	CF	ilber of memories	Variable range: 1.10 to 1.41; setting resolution: 0.01;					
wave	01		RMS value correction: yes					
	Clin	ping rate	Variable range 40.0% to 100.0%; setting resolution: 0.1%;					
		. 5	RMS value correction: no					
Arbitrary	Nun	nber of memories						
wave	-	veform length	4096 words					
		olitude resolution	16-bit					
External	7 11119	External	Sync signal source switching: external sync signal (EXT)					
signal inp	nut	sync input	or power input (LINE)					
orginal in		VCA input	Gain setting range: 0.0 to 227.0 times/0.0 to 454.0 times Resolution: 0.1					
		External	Gain setting range: 0.0 to 227.0 times/0.0 to 454.0 times, Resolution: 0.1					
		signal input	Input frequency range: DC to 550 Hz (sine wave),					
		(EXT / ADD)	DC to 100 Hz (not sine wave).					
Memory	funct		Store and recall settings from nonvolatile memory					
		Number of	Basic settings: 30; sequences: 5; simulations: 5; clipped sine waves: 3;					
		memories	arbitrary waves: 16					
Protectio	ns	1	Protective operation for abnormal output (output overvoltage, output over					
			current, etc.), power unit error, and internal control error					
			(internal communication error, etc.)					
External	cont	rol I/O	Enables control of the system using external signals (or no-voltage contacts)					
			and state output.					
Interface			USB interface [USB1.1, USBTMC], RS-232 interface (not capable of binary					
		select on order)	transfer), GPIB interface (IEEE 488.1 std 1987) (not capable of binary transfer					
(-		,	or serial polling), LAN interface (LXI 1.4)					
USB mer	norv	,	Usable memory: conforms to USB 1.1 or USB 2.0,					
	,		Connector: USB-A (front panel)					
			Readable/writable content: basic setting memory, sequence,					
			AC line simulation, arbitrary wave.					
Output relay control			Selects either ON/OFF using output relay, or high-impedance without using					
Surput rolay control			output relay.					
Output waveform monitor			Monitors waveform of output voltage or output current. (switchable)					
LCD disp			5.7 inch, contrast 0 to 99, blue or white base color.					
Others	,		Beep, key lock, output setting at power-on, trigger output setting,					
			time unit setting (for sequence and simulation), reset function.					

■General Information

Model name	Single-phase	DP015S	DP030S	DP045S	DP060S	DP075S	DP090S	DP105S	DP120S	DP240S	DP360S
	Single-phase 3-wire	_	DP030D	_	DP060D	_	DP090D	_	DP120D	_	_
	Three-phase			DP045T	_		DP090T	_	_	_	_
Withstanding voltage		AC 1500 V or DC 2130 V (inputs vs. outputs/chassis, inputs/chassis vs. outputs)									
Insulation resistance		30 MΩ or higher (DC 500 V), (inputs vs. outputs/chassis, inputs/chassis vs. outputs)									
Operating temperature		0°C to +50°C									
Operating humidity		5% to 85% RH, (Absolute humidity 1 to 25 g/m³, no condensation)									
Dimensions (W×H×D) mm (no protrusions)		430×398×562		430×665×562		430×1021×562		430×1287×562		860×1463×649	1290×1463×649
Weight (appro	ox.)	38 kg	50 kg	70 kg	82 kg	110 kg	125 kg	140 kg	155 kg	345 kg	510 kg
Chassis		Type1		Type2		Type3		Type4		Type5	Type6
Accesories		Instruction manual, control software, LabVIEW driver (version 8.6 or higher), power cable									

Note: The contents of this catalog are current as of January 30th, 2020

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Aufgrund laufender Weiterentwicklungen sind Änderungen der Spezifikationen vorbehalten. Alle Angaben vorbehaltlich Satz- und Druckfehler.

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<sup>Products appearance and specifications are subject to change without notice.

Before purchase contact us to confirm the latest specifications, price and delivery date.</sup>