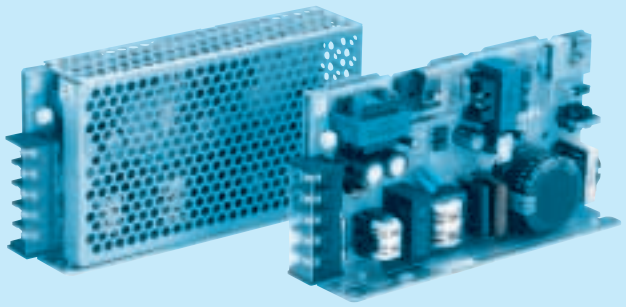
COSEL AC-DC Power Supplies Enclosed type

PAA50F

Ordering information

PAA	50	F	-5	-□
①	②	③	④	⑤

RoHS



Recommended EMI/EMC Filter NAC-06-472



High voltage pulse noise type : NAP series
Low leakage current type : NAM series

*The EMI/EMC Filter is recommended to connect with several devices.

①Series name
②Output wattage
③Universal input
④Output voltage
⑤Optional *4
C :with Coating
G :Low leakage current
J :Connector type
N :with Cover
R :with Remote ON/OFF

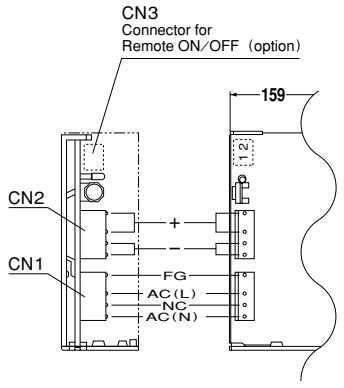
MODEL	PAA50F-3	PAA50F-5	PAA50F-12	PAA50F-15	PAA50F-24	PAA50F-48
MAX OUTPUT WATTAGE[W]	30	50	51.6	52.5	52.8	52.8
DC OUTPUT	3V 10A	5V 10A	12V 4.3A	15V 3.5A	24V 2.2A	48V 1.1A

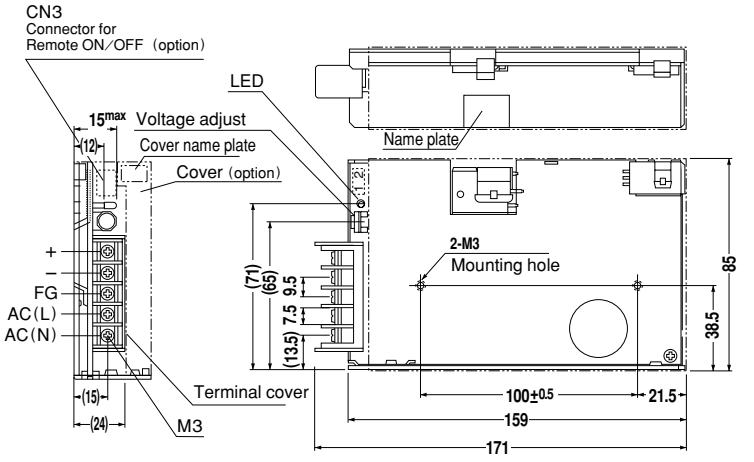
SPECIFICATIONS

	MODEL		PAA50F-3	PAA50F-5	PAA50F-12	PAA50F-15	PAA50F-24	PAA50F-48
INPUT	VOLTAGE[V]		AC85 - 264 1 ϕ					
	CURRENT[A]	ACIN 100V	0.5typ	0.8typ				
		ACIN 200V	0.25typ	0.4typ				
	FREQUENCY[Hz]		50/60 (47 - 63)					
	EFFICIENCY[%]		67typ	74typ	77typ	78typ	80typ	80typ
	POWER FACTOR	ACIN 100V	0.95typ (Io=100%)					
	INRUSH CURRENT[A]	ACIN 100V	15typ (Io=100%)					
		ACIN 200V	15typ (Io=100%)					
	LEAKAGE CURRENT[mA]		0.75max (60Hz, According to UL, CSA, VDE and DEN-AN)					
OUTPUT	VOLTAGE[V]		3	5	12	15	24	48
	CURRENT[A]		10	10	4.3	3.5	2.2	1.1
	LINE REGULATION[mV]		20max	20max	48max	60max	96max	192max
	LOAD REGULATION[mV]		40max	40max	100max	120max	150max	240max
	RIPPLE[mVp-p]	0 to +50℃ *1	80max	80max	120max	120max	120max	150max
		-10 - 0℃ *1	140max	140max	160max	160max	160max	200max
	RIPPLE NOISE[mVp-p]	0 to +50℃ *1	120max	120max	150max	150max	150max	250max
		-10 - 0℃ *1	160max	160max	180max	180max	180max	300max
	TEMPERATURE REGULATION[mV]	0 to +50℃	50max	50max	120max	150max	240max	480max
		-10 to +50℃	60max	60max	150max	180max	290max	600max
	DRIFT[mV]	*2	20max	20max	48max	60max	96max	192max
	START-UP TIME[ms]		500max (ACIN 85V, Io=100%)					
	HOLD-UP TIME[ms]		10typ (ACIN 85V, Io=100%) 20typ (ACIN 100V, Io=100%) 100typ (ACIN 200V, Io=100%)					
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		2.85 - 3.6	±10%				
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically					
	OVERVOLTAGE PROTECTION		4.00 - 5.25V	Works at 115 - 140% of rating				
	OPERATING INDICATION		LED (Green)					
	REMOTE ON/OFF		Optional (Refer to Instruction Manual)					
ISOLATION	INPUT-OUTPUT · RC	*3	AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)					
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)					
	OUTPUT · RC-FG	*3	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)					
	OUTPUT-RC	*3	AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ min (At Room Temperature)					
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +65℃, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max					
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max					
	VIBRATION		10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis					
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis					
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS		UL60950-1, EN60950-1, EN50178, CSA C22.2 No.60950-1 Complies with DEN-AN and IEC60950-1					
	CONDUCTED NOISE		Complies with FCC-B, CISPR22-B, EN55022-B, VCCI-B					
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2					
OTHERS	CASE SIZE/WEIGHT		37×85×159mm (without terminal block) (W×H×D) /400g max (without cover)					
	COOLING METHOD		Convection					

*1 According to 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN : RM101).
*2 Drift is change in DC output for an eight hour period after a half-hour warm-up at 25℃, with the input voltage held constant at the rated input/output.
*3 Applicable when Remote ON/OFF(optional) is added.
*4 Please contact us about safety approvals for the model with option.
* Derating is required when operated with case cover.

External view





I/O Connector		Mating Connector	Terminal
CN1	10-31-1048	10-63-3044	Chain: 08-70-1031 Loose: 08-70-1030
CN2	09-65-2049	09-50-1043	Chain: 08-70-1031 Loose: 08-70-1030

※Maximum 5A per pin of CN2 can be applied. (Mfr : Molex)

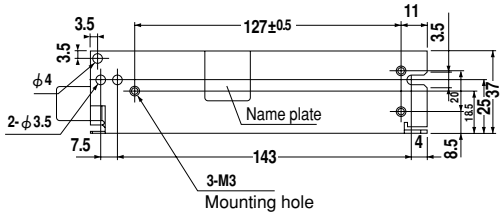
※Weight: 400g or less (without cover)
※Cover is optional
※Tolerance ±1

Connector type	Barrier strip type

CN3 Option (Mfr : J.S.T.)

Pin No.	Contents
1	RC(+)
2	RC(−)

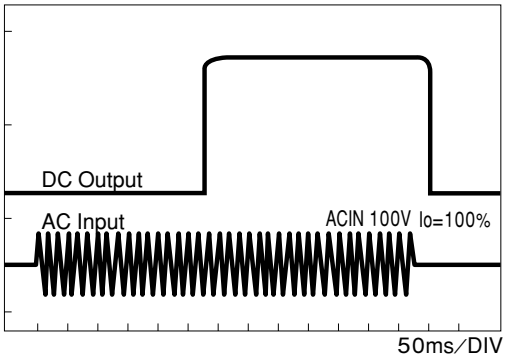
Model B2B-XH-A
Mating Connector (Terminal)
XHP-2
(BXH-001T-P0.6
or SXH-001T-P0.6)



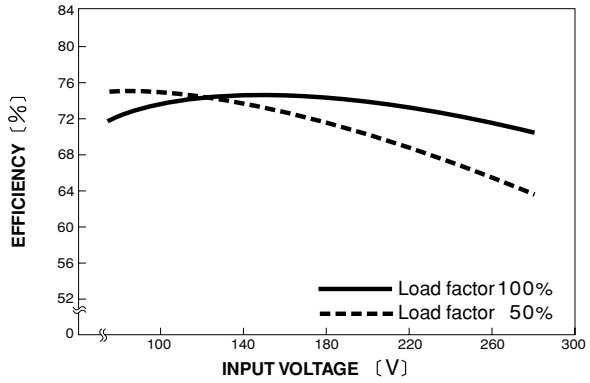
※Mounting torque: 0.49N·m (5.0kgf·cm) max

Performance data

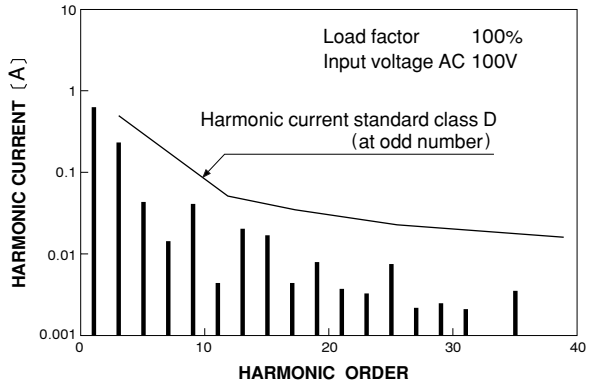
■RISE TIME & FALL TIME (PAA50F-5)



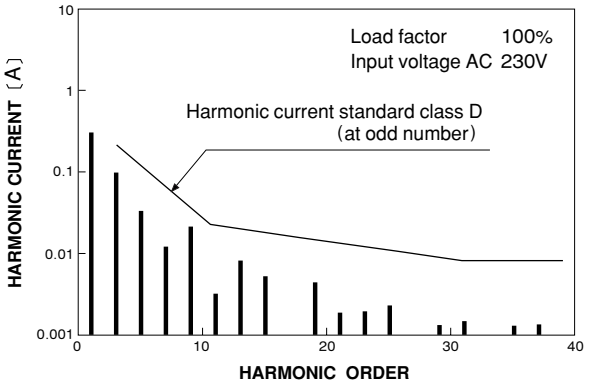
■EFFICIENCY (PAA50F-5)



■HARMOINC CURRENT (PAA50F-5)



■HARMONIC CURRENT (PAA50F-5)



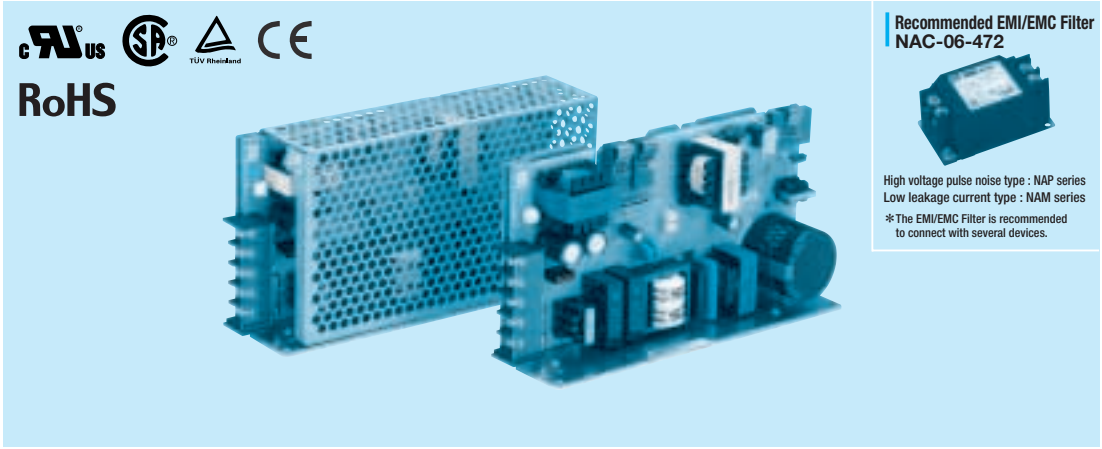
COSEL AC-DC Power Supplies Enclosed type

PAA75F

Ordering information

PAA 75 F -5 -□

① ② ③ ④ ⑤



Recommended EMI/EMC Filter
NAC-06-472

High voltage pulse noise type : NAP series
Low leakage current type : NAM series
＊The EMI/EMC Filter is recommended to connect with several devices.

①Series name
②Output wattage
③Universal input
④Output voltage
⑤Optional ＊4
C :with Coating
G :Low leakage current
J :Connector type
N :with Cover
R :with Remote ON/OFF

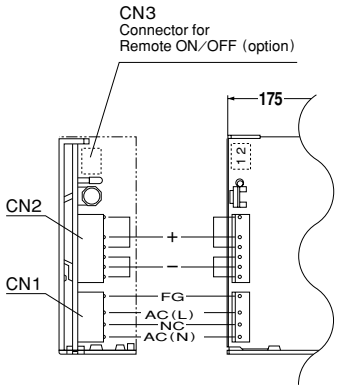
MODEL	PAA75F-3	PAA75F-5	PAA75F-12	PAA75F-15	PAA75F-24	PAA75F-48
MAX OUTPUT WATTAGE[W]	45	75	75.6	75	76.8	76.8
DC OUTPUT	3V 15A	5V 15A	12V 6.3A	15V 5A	24V 3.2A	48V 1.6A

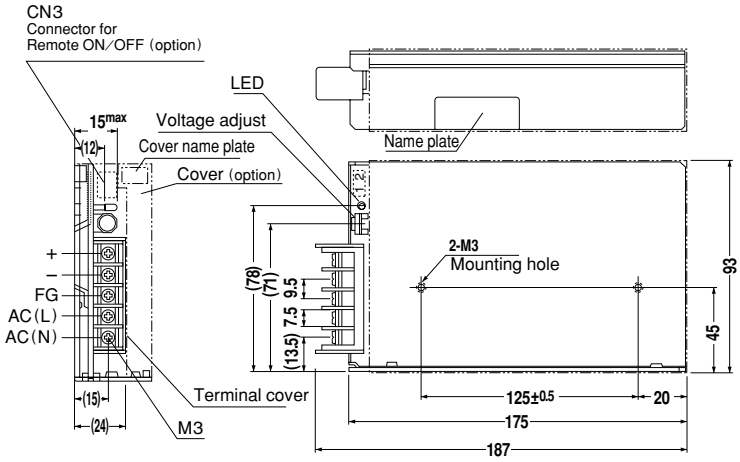
SPECIFICATIONS

	MODEL		PAA75F-3	PAA75F-5	PAA75F-12	PAA75F-15	PAA75F-24	PAA75F-48
INPUT	VOLTAGE[V]		AC85 - 264 1 ϕ					
	CURRENT[A]	ACIN 100V	0.7typ	1.2typ				
		ACIN 200V	0.35typ	0.6typ				
	FREQUENCY[Hz]		50/60 (47 - 63)					
	EFFICIENCY[%]		67typ	74typ	77typ	78typ	80typ	80typ
	POWER FACTOR	ACIN 100V	0.95typ (Io=100%)					
	INRUSH CURRENT[A]	ACIN 100V	15typ (Io=100%)					
		ACIN 200V	15typ (Io=100%)					
	LEAKAGE CURRENT[mA]		0.75max (60Hz, According to UL, CSA, VDE and DEN-AN)					
OUTPUT	VOLTAGE[V]		3	5	12	15	24	48
	CURRENT[A]		15	15	6.3	5	3.2	1.6
	LINE REGULATION[mV]		20max	20max	48max	60max	96max	192max
	LOAD REGULATION[mV]		40max	40max	100max	120max	150max	240max
	RIPPLE[mVp-p]	0 to +50℃ ＊1	80max	80max	120max	120max	120max	150max
		-10 - 0℃ ＊1	140max	140max	160max	160max	160max	200max
	RIPPLE NOISE[mVp-p]	0 to +50℃ ＊1	120max	120max	150max	150max	150max	250max
		-10 - 0℃ ＊1	160max	160max	180max	180max	180max	300max
	TEMPERATURE REGULATION[mV]	0 to +50℃	50max	50max	120max	150max	240max	480max
		-10 to +50℃	60max	60max	150max	180max	290max	600max
	DRIFT[mV]	＊2	20max	20max	48max	60max	96max	192max
	START-UP TIME[ms]		500max (ACIN 85V, Io=100%)					
	HOLD-UP TIME[ms]		10typ (ACIN 85V, Io=100%) 20typ (ACIN 100V, Io=100%) 100typ (ACIN 200V, Io=100%)					
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		2.85 - 3.6	±10%				
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically					
	OVERVOLTAGE PROTECTION		4.00 - 5.25V	Works at 115 - 140% of rating				
	OPERATING INDICATION		LED (Green)					
	REMOTE ON/OFF		Optional (Refer to Instruction Manual)					
ISOLATION	INPUT-OUTPUT · RC	＊3	AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)					
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)					
	OUTPUT · RC-FG	＊3	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)					
	OUTPUT-RC	＊3	AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ min (At Room Temperature)					
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +65℃, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max					
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max					
	VIBRATION		10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis					
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis					
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS		UL60950-1, EN60950-1, EN50178, CSA C22.2 No.60950-1 Complies with DEN-AN and IEC60950-1					
	CONDUCTED NOISE		Complies with FCC-B, CISPR22-B, EN55022-B, VCCI-B					
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2					
OTHERS	CASE SIZE/WEIGHT		42×93×175mm (without terminal block) (W×H×D) /550g max (without cover)					
	COOLING METHOD		Convection					

＊1 According to 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN : RM101).
＊2 Drift is change in DC output for an eight hour period after a half-hour warm-up at 25℃, with the input voltage held constant at the rated input/output.
＊3 Applicable when Remote ON/OFF(optional) is added.
＊4 Please contact us about safety approvals for the model with option.
＊ Derating is required when operated with case cover.

External view

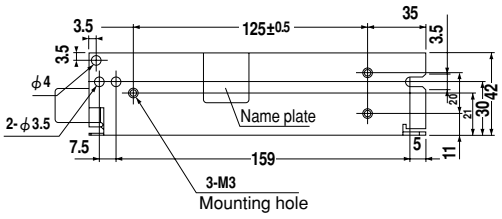




I/O Connector		Mating Connector	Terminal
CN1	10-31-1048	10-63-3044	Chain: 08-70-1031 Loose: 08-70-1030
CN2	09-65-2069	09-50-1063	Chain: 08-70-1031 Loose: 08-70-1030

※Maximum 5A per pin of CN2 can be applied. (Mfr : Molex)

※Weight: 500g or less (without cover)
※Cover is optional
※Tolerance± 1



※Mounting torque:0.49N·m (5.0kgf·cm) max

Connector type

CN3 Option (Mfr : J.S.T.)

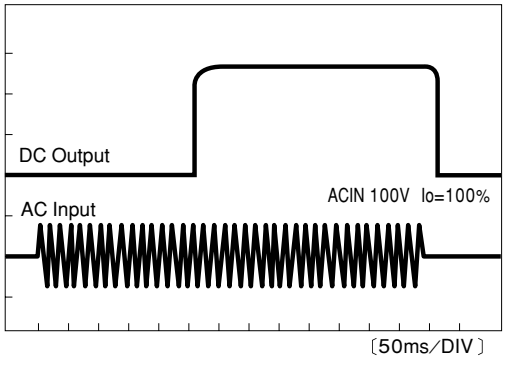
Pin No.	Contents
1	RC(+)
2	RC(−)

Barrier strip type

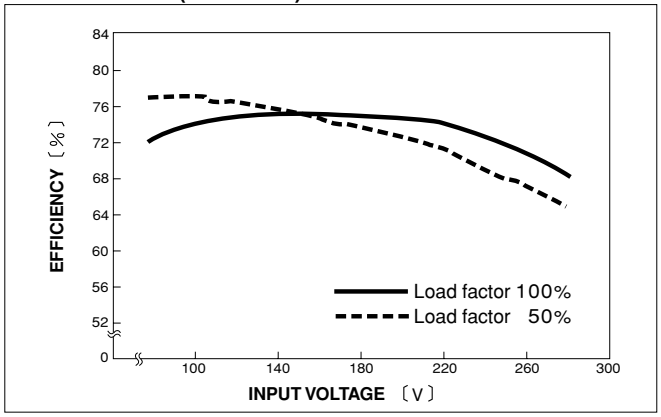
Model B2B-XH-A
Mating Connector (Terminal)
XHP-2
(BXH-001T-P0.6
or SXH-001T-P0.6)

Performance data

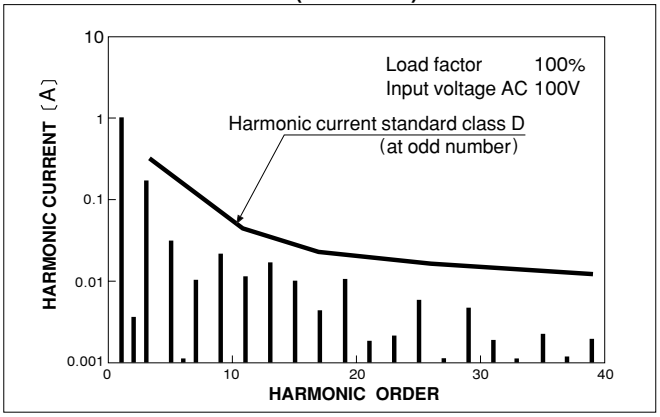
■RISE TIME & FALL TIME (PAA75F-5)



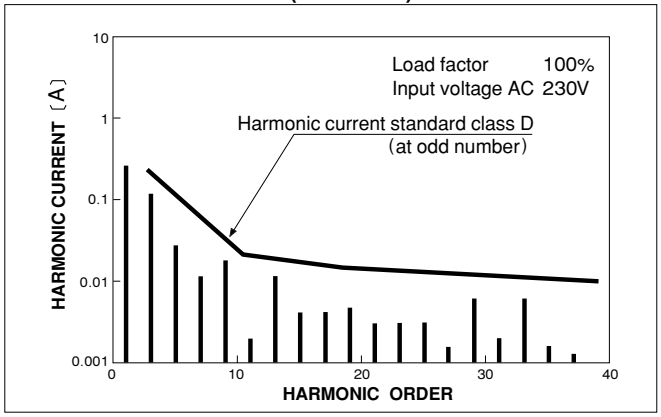
■EFFICIENCY (PAA75F-5)



■HARMOINC CURRENT (PAA75F-5)



■HARMONIC CURRENT (PAA75F-5)

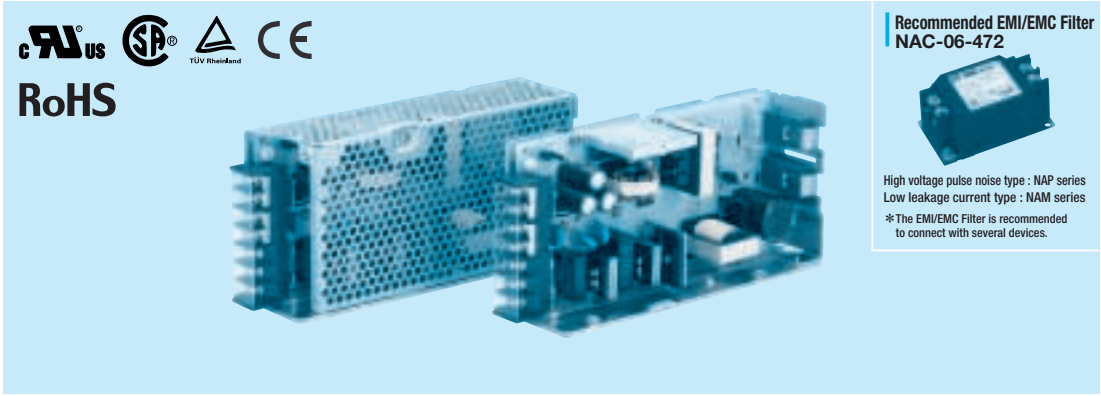


COSEL AC-DC Power Supplies Enclosed type

PAA100F

Ordering information

PAA	100	F	-5	-□
①	②	③	④	⑤



Recommended EMI/EMC Filter
NAC-06-472

High voltage pulse noise type : NAP series
Low leakage current type : NAM series
＊The EMI/EMC Filter is recommended to connect with several devices.

①Series name
②Output wattage
③Universal input
④Output voltage
⑤Optional ＊4
C :with Coating
G :Low leakage current
N :with Cover
R :with Remote ON/OFF

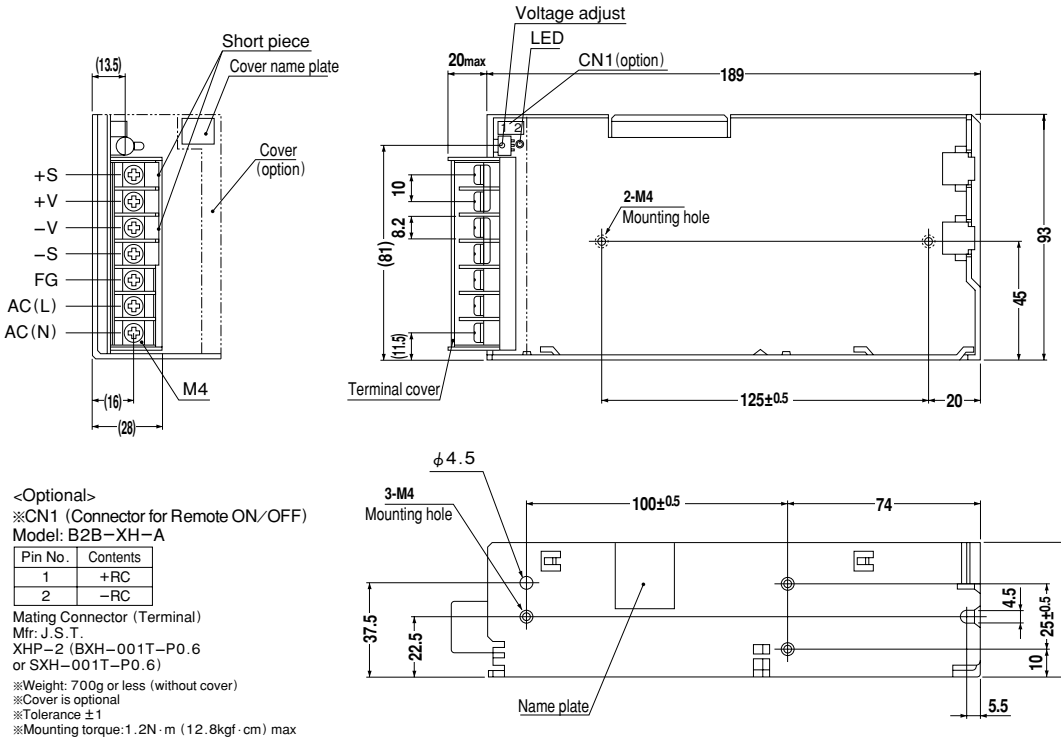
MODEL	PAA100F-3	PAA100F-5	PAA100F-12	PAA100F-15	PAA100F-24	PAA100F-48
MAX OUTPUT WATTAGE[W]	60	100	102	105	108	100.8
DC OUTPUT	3V 20A	5V 20A	12V 8.5A	15V 7A	24V 4.5A	48V 2.1A

SPECIFICATIONS

	MODEL		PAA100F-3	PAA100F-5	PAA100F-12	PAA100F-15	PAA100F-24	PAA100F-48
INPUT	VOLTAGE[V]		AC85 - 264 1φ or DC120 - 340					
	CURRENT[A]	ACIN 100V	0.9typ	1.4typ				
		ACIN 200V	0.45typ	0.7typ				
	FREQUENCY[Hz]		50/60 (47 - 63)					
	EFFICIENCY[%]		65typ	74typ	76typ	77typ	79typ	79typ
	POWER FACTOR	ACIN 100V	0.99typ (Io=100%)					
		ACIN 200V	0.95typ (Io=100%)					
	INRUSH CURRENT[A]	ACIN 100V	20typ (Io=100%) (At cold start)					
		ACIN 200V	40typ (Io=100%) (At cold start)					
	LEAKAGE CURRENT[mA]		0.75max (60Hz, According to UL, CSA, VDE and DEN-AN)					
OUTPUT	VOLTAGE[V]		3	5	12	15	24	48
	CURRENT[A]		20	20	8.5	7	4.5	2.1
	LINE REGULATION[mV]		20max	20max	48max	60max	96max	192max
	LOAD REGULATION[mV]		40max	40max	100max	120max	150max	240max
	RIPPLE[mVp-p]	0 to +50℃ ＊1	80max	80max	120max	120max	120max	150max
		-10 - 0℃ ＊1	140max	140max	160max	160max	160max	200max
	RIPPLE NOISE[mVp-p]	0 to +50℃ ＊1	120max	120max	150max	150max	150max	400max
		-10 - 0℃ ＊1	160max	160max	180max	180max	180max	600max
	TEMPERATURE REGULATION[mV]	0 to +50℃	50max	50max	120max	150max	240max	480max
		-10 to +50℃	60max	60max	150max	180max	290max	600max
	DRIFT[mV] ＊2		20max	20max	48max	60max	96max	192max
	START-UP TIME[ms]		500max (ACIN 85V, Io=100%)					
	HOLD-UP TIME[ms]		20typ (Io=100%)					
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		2.85 - 3.6	±10%				
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically					
	OVERVOLTAGE PROTECTION		4.00 - 5.25V	Works at 115 - 140% of rating				
	OPERATING INDICATION		LED (Green)					
	REMOTE SENSING		Provided					
	REMOTE ON/OFF		Optional (Refer to Instruction Manual)					
ISOLATION	INPUT-OUTPUT · RC ＊3		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)					
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)					
	OUTPUT · RC-FG ＊3		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)					
	OUTPUT-RC ＊3		AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ min (At Room Temperature)					
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +65℃, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max					
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max					
	VIBRATION		10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis					
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis					
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS		UL60950-1, EN60950-1, EN50178, CSA C22.2 No.60950-1 Complies with DEN-AN and IEC60950-1					
	CONDUCTED NOISE		Complies with FCC-B, CISPR22-B, EN55022-B, VCCI-B					
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2					
OTHERS	CASE SIZE/WEIGHT		50×93×189mm (without terminal block) (W×H×D) /700g max (without cover)					
	COOLING METHOD		Convection					

＊1 According to 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN : RM101).
＊2 Drift is change in DC output for an eight hour period after a half-hour warm-up at 25℃, with the input voltage held constant at the rated input/output.
＊3 Applicable when Remote ON/OFF(optional) is added.
＊4 Please contact us about safety approvals for the model with option.
＊ Derating is required when operated with cover.

External view



<Optional>
※CN1 (Connector for Remote ON/OFF)
Model: B2B−XH−A

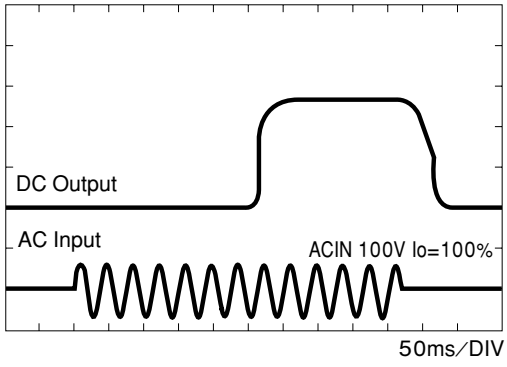
Pin No.	Contents
1	+RC
2	−RC

Mating Connector (Terminal)
Mfr: J.S.T.
XHP−2 (BXH−001T−P0.6
or SXH−001T−P0.6)

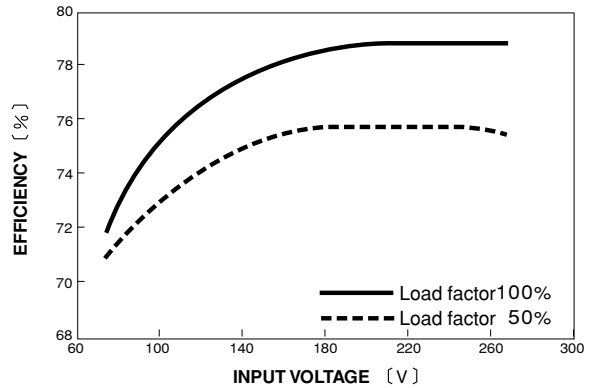
※Weight: 700g or less (without cover)
※Cover is optional
※Tolerance ±1
※Mounting torque: 1.2N·m (12.8kgf·cm) max

Performance data

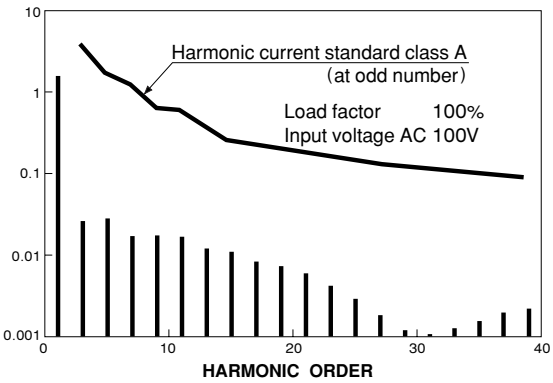
■RISE TIME & FALL TIME (PAA100F-5)



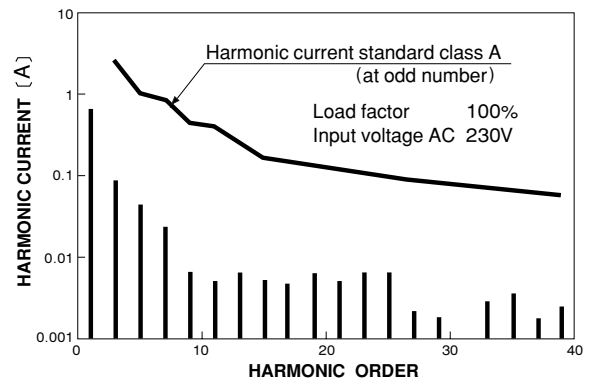
■EFFICIENCY (PAA100F-5)



■HARMOINC CURRENT (PAA100F-5)



■ HARMONIC CURRENT (PAA100F-5)



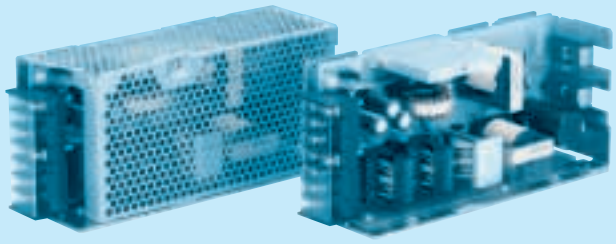
COSEL AC-DC Power Supplies Enclosed type

PAA150F

Ordering information

PAA 150 F -5 -□

① ② ③ ④ ⑤



Recommended EMI/EMC Filter NAC-06-472



High voltage pulse noise type : NAP series
Low leakage current type : NAM series

＊The EMI/EMC Filter is recommended to connect with several devices.

①Series name
②Output wattage
③Universal input
④Output voltage
⑤Optional ＊4
C :with Coating
G :Low leakage current
N :with Cover
R :with Remote ON/OFF

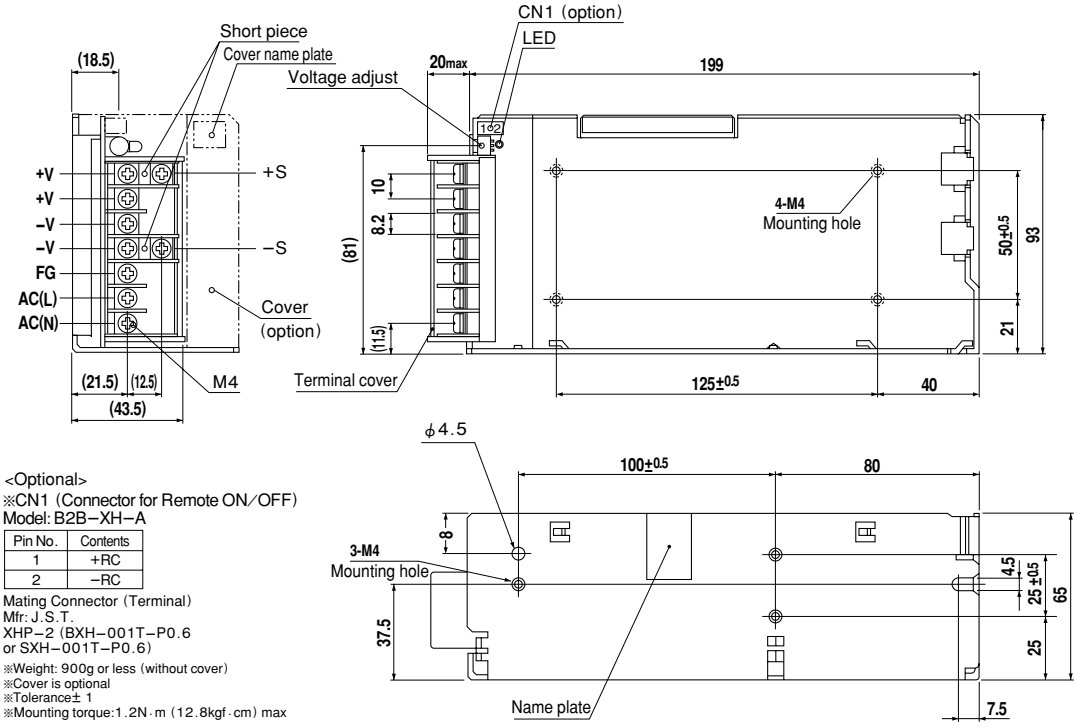
MODEL	PAA150F-3	PAA150F-5	PAA150F-12	PAA150F-15	PAA150F-24	PAA150F-48
MAX OUTPUT WATTAGE[W]	90	150	156	150	156	158.4
DC OUTPUT	3V 30A	5V 30A	12V 13A	15V 10A	24V 6.5A	48V 3.3A

SPECIFICATIONS

	MODEL		PAA150F-3	PAA150F-5	PAA150F-12	PAA150F-15	PAA150F-24	PAA150F-48
INPUT	VOLTAGE[V]		AC85 - 264 1φ or DC120 - 340					
	CURRENT[A]	ACIN 100V	1.4typ	2.0typ				
		ACIN 200V	0.7typ	1.0typ				
	FREQUENCY[Hz]		50/60 (47 - 63)					
	EFFICIENCY[%]		67typ	75typ	78typ	80typ	81typ	81typ
	POWER FACTOR	ACIN 100V	0.99typ (Io=100%)					
		ACIN 200V	0.95typ (Io=100%)					
	INRUSH CURRENT[A]	ACIN 100V	20typ (Io=100%) (At cold start)					
		ACIN 200V	40typ (Io=100%) (At cold start)					
	LEAKAGE CURRENT[mA]		0.75max (60Hz, According to UL, CSA, VDE and DEN-AN)					
OUTPUT	VOLTAGE[V]		3	5	12	15	24	48
	CURRENT[A]		30	30	13	10	6.5	3.3
	LINE REGULATION[mV]		20max	20max	48max	60max	96max	192max
	LOAD REGULATION[mV]		40max	40max	100max	120max	150max	240max
	RIPPLE[mVp-p]	0 to +50℃ ＊1	80max	80max	120max	120max	120max	150max
		-10 - 0℃ ＊1	140max	140max	160max	160max	160max	200max
	RIPPLE NOISE[mVp-p]	0 to +50℃ ＊1	120max	120max	150max	150max	150max	400max
		-10 - 0℃ ＊1	160max	160max	180max	180max	180max	600max
	TEMPERATURE REGULATION[mV]	0 to +50℃	50max	50max	120max	150max	240max	480max
		-10 to +50℃	60max	60max	150max	180max	290max	600max
	DRIFT[mV] ＊2		20max	20max	48max	60max	96max	192max
	START-UP TIME[ms]		500max (ACIN 85V, Io=100%)					
	HOLD-UP TIME[ms]		20typ (Io=100%)					
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		2.85 - 3.6	±10%				
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically					
	OVERVOLTAGE PROTECTION		4.00 - 5.25V	Works at 115 - 140% of rating				
	OPERATING INDICATION		LED (Green)					
	REMOTE SENSING		Provided					
	REMOTE ON/OFF		Optional (Refer to Instruction Manual)					
ISOLATION	INPUT-OUTPUT · RC ＊3		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)					
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)					
	OUTPUT · RC-FG ＊3		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)					
	OUTPUT-RC ＊3		AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ min (At Room Temperature)					
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +65℃, 10 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max					
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 10 - 90%RH (Non condensing), 9,000m (30,000feet) max					
	VIBRATION		10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis					
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis					
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS		UL60950-1, EN60950-1, EN50178, CSA C22.2 No.60950-1 Complies with DEN-AN and IEC60950-1					
	CONDUCTED NOISE		Complies with FCC-B, CISPR22-B, EN55022-B, VCCI-B					
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2					
OTHERS	CASE SIZE/WEIGHT		65×93×199mm (without terminal block) (W×H×D) /900g max (without cover)					
	COOLING METHOD		Convection					

＊1 According to 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN : RM101).
＊2 Drift is change in DC output for an eight hour period after a half-hour warm-up at 25℃, with the input voltage held constant at the rated input/output.
＊3 Applicable when Remote ON/OFF(optional) is added.
＊4 Please contact us about safety approvals for the model with option.
＊ Derating is required when operated with cover.

External view



<Optional>
※CN1 (Connector for Remote ON/OFF)
Model: B2B−XH−A

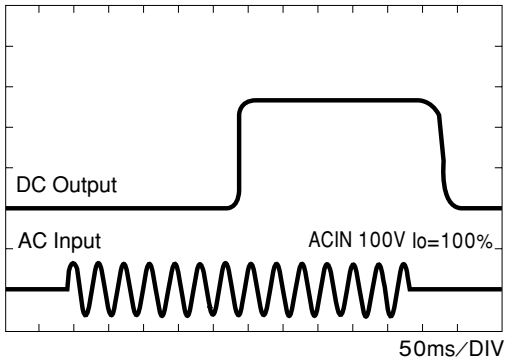
Pin No.	Contents
1	+RC
2	−RC

Mating Connector (Terminal)
Mfr: J.S.T.
XHP−2 (BXH−001T−P0.6
or SXH−001T−P0.6)

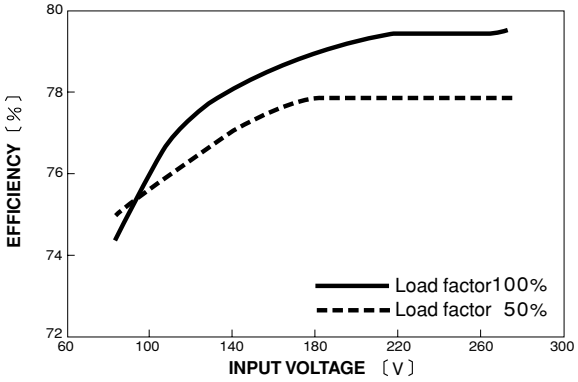
※Weight: 900g or less (without cover)
※Cover is optional
※Tolerance± 1
※Mounting torque:1.2N·m (12.8kgf·cm) max

Performance data

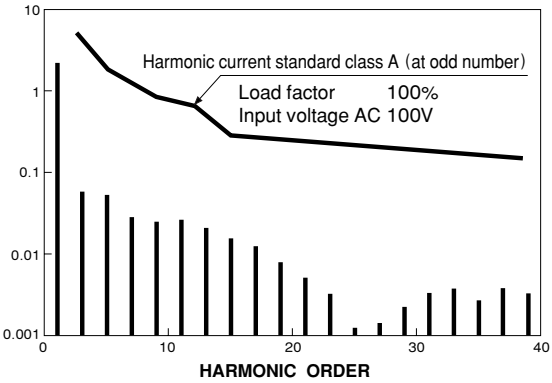
■RISE TIME & FALL TIME (PAA150F-5)



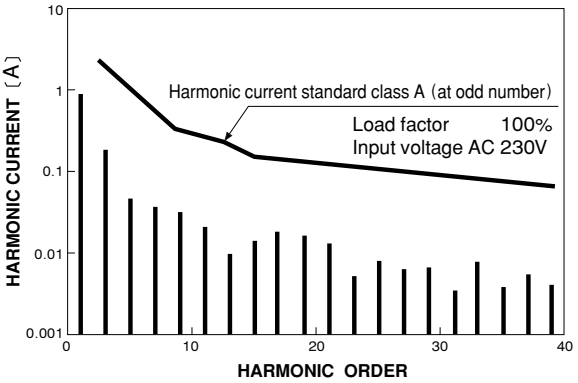
■EFFICIENCY (PAA150F-5)



■HARMOINC CURRENT (PAA150F-5)



■INPUT HARMONIC CURRENT (PAA150F-5)



COSEL AC-DC Power Supplies Enclosed type

PAA300F

Ordering information

PAA 300 F -5 -□

① ② ③ ④ ⑤

RoHS



Recommended EMI/EMC Filter NAC-10-472



High voltage pulse noise type : NAP series
Low leakage current type : NAM series

*The EMI/EMC Filter is recommended to connect with several devices.

①Series name
②Output wattage
③Universal input
④Output voltage
⑤Optional *3
C :with Coating
G :Low leakage current
R :Positive logic control
W :with Alarm signal

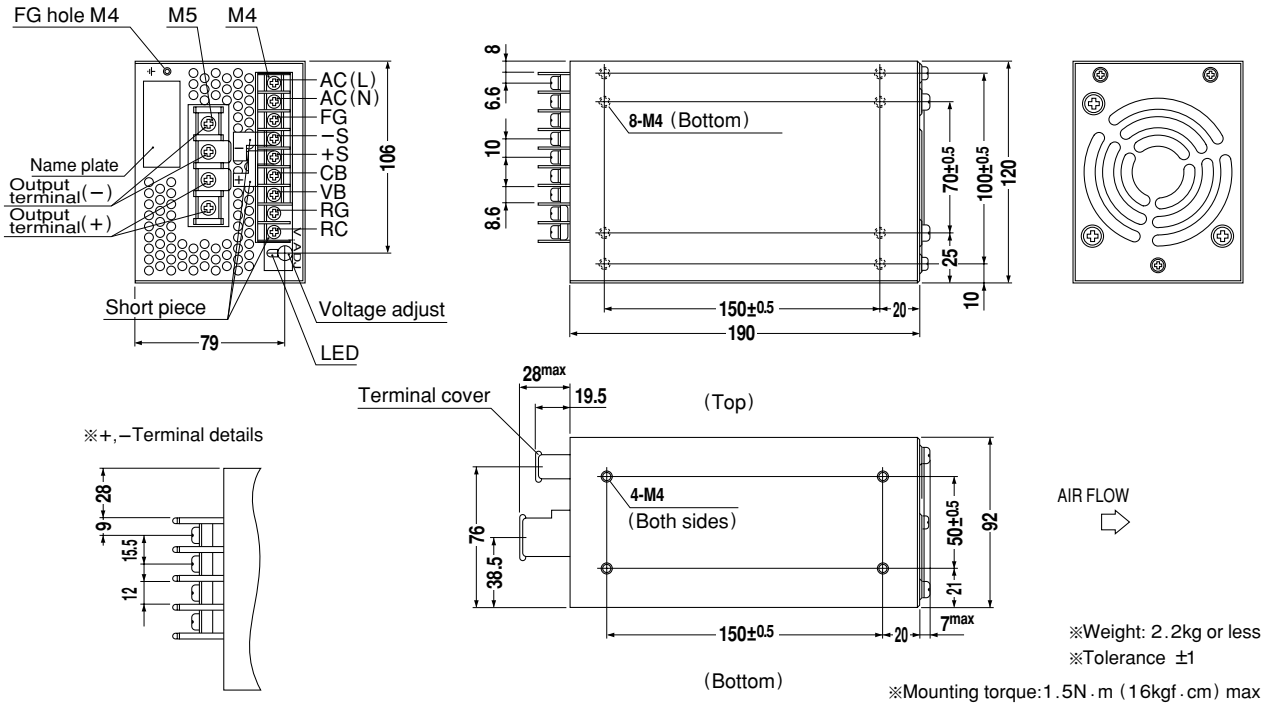
MODEL	PAA300F-3	PAA300F-5	PAA300F-12	PAA300F-15	PAA300F-24	PAA300F-48
MAX OUTPUT WATTAGE[W]	180	300	324	330	336	336
DC OUTPUT	3V 60A	5V 60A	12V 27A	15V 22A	24V 14A	48V 7A

SPECIFICATIONS

	MODEL		PAA300F-3	PAA300F-5	PAA300F-12	PAA300F-15	PAA300F-24	PAA300F-48
INPUT	VOLTAGE[V]		AC85 - 264 1φ or DC120 - 340					
	CURRENT[A]	ACIN 100V	2.6typ	4.4typ				
		ACIN 200V	1.3typ	2.2typ				
	FREQUENCY[Hz]		50/60 (47 - 63)					
	EFFICIENCY[%]		68typ	74typ	78typ	80typ	81typ	81typ
	POWER FACTOR	ACIN 100V	0.99typ (Io=100%)					
		ACIN 200V	0.95typ (Io=100%)					
	INRUSH CURRENT[A]	ACIN 100V	20typ (Io=100%)					
		ACIN 200V	40typ (Io=100%)					
	LEAKAGE CURRENT[mA]		0.75max (60Hz, According to UL, CSA, VDE and DEN-AN)					
OUTPUT	VOLTAGE[V]		3	5	12	15	24	48
	CURRENT[A]		60	60	27	22	14	7
	LINE REGULATION[mV]		20max	20max	48max	60max	96max	192max
	LOAD REGULATION[mV]		40max	40max	100max	120max	150max	300max
	RIPPLE[mVp-p]	0 to +50℃ *1	80max	80max	120max	120max	120max	150max
		-10 - 0℃ *1	140max	140max	160max	160max	160max	200max
	RIPPLE NOISE[mVp-p]	0 to +50℃ *1	120max	120max	150max	150max	150max	200max
		-10 - 0℃ *1	160max	160max	180max	180max	180max	300max
	TEMPERATURE REGULATION[mV]	0 to +50℃	40max	50max	120max	150max	240max	480max
		-10 to +50℃	50max	60max	150max	180max	290max	580max
	DRIFT[mV]	*2	12max	20max	48max	60max	96max	192max
	START-UP TIME[ms]		500max (ACIN 85V, Io=100%)					
	HOLD-UP TIME[ms]		20typ (Io=100%)					
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		2.85 - 3.45	±10%				
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically					
	OVERVOLTAGE PROTECTION		4.00 - 5.25V	Works at 115 - 140% of rating				
	OPERATING INDICATION		LED (Green)					
	REMOTE SENSING		Provided					
	REMOTE ON/OFF		Provided					
ISOLATION	INPUT-OUTPUT · RC		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)					
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)					
	OUTPUT · RC-FG		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)					
	OUTPUT-RC		AC100V 1minute, Cutoff current = 100mA, DC100V 50MΩ min (At Room Temperature)					
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +65℃, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max					
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max					
	VIBRATION		10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis					
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis					
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS		UL60950-1, EN60950-1, EN50178, CSA C22.2 No.60950-1 Complies with DEN-AN and IEC60950-1					
	CONDUCTED NOISE		Complies with FCC-B, CISPR22-B, EN55022-B, VCCI-B					
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2					
OTHERS	CASE SIZE/WEIGHT		120×92×190mm (without terminal block and screw) (W×H×D) /2.2kg max					
	COOLING METHOD		Forced cooling (internal fan)					

*1 According to 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN : RM101).
*2 Drift is change in DC output for an eight hour period after a half-hour warm-up at 25℃, with the input voltage held constant at the rated input/output.
*3 Please contact us about safety approvals for the model with option.
* Avoid prolonged use under over-load.

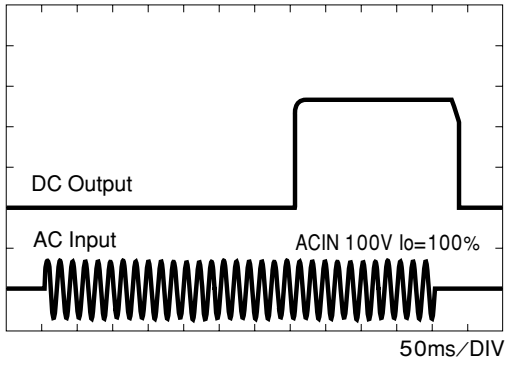
External view



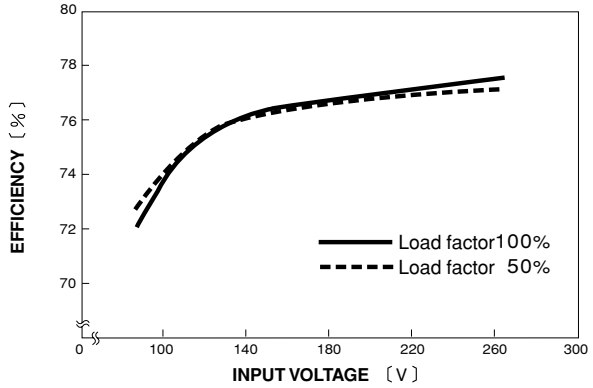
※Weight: 2.2kg or less
※Tolerance ±1
※Mounting torque:1.5N·m (16kgf·cm) max

Performance data

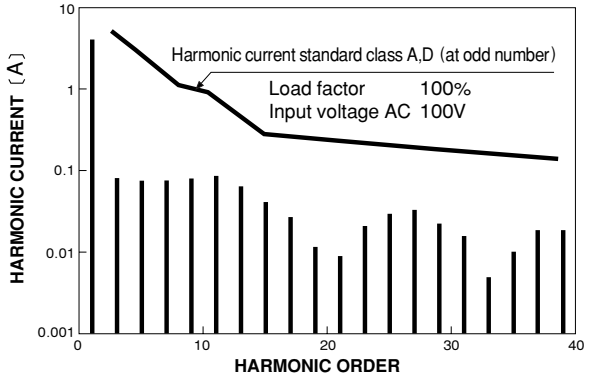
■RISE TIME & FALL TIME (PAA300F-5)



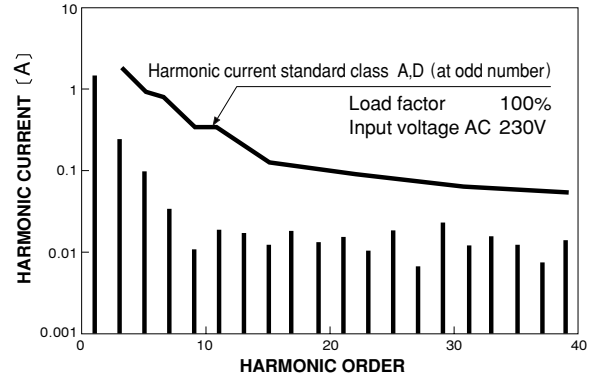
■EFFICIENCY (PAA300F-5)



■HARMOINC CURRENT (PAA300F-5)



■INPUT HARMONIC CURRENT (PAA300F-5)



COSEL AC-DC Power Supplies Enclosed type

PAA600F

Ordering information

PAA 600 F -5 -□

① ② ③ ④ ⑤

RoHS



Recommended EMI/EMC Filter NAC-16-472



High voltage pulse noise type : NAP series
Low leakage current type : NAM series

＊The EMI/EMC Filter is recommended to connect with several devices.

①Series name
②Output wattage
③Universal input
④Output voltage
⑤Optional ＊3
C :with Coating
G :Low leakage current
R :Positive logic control
W :with Alarm signal

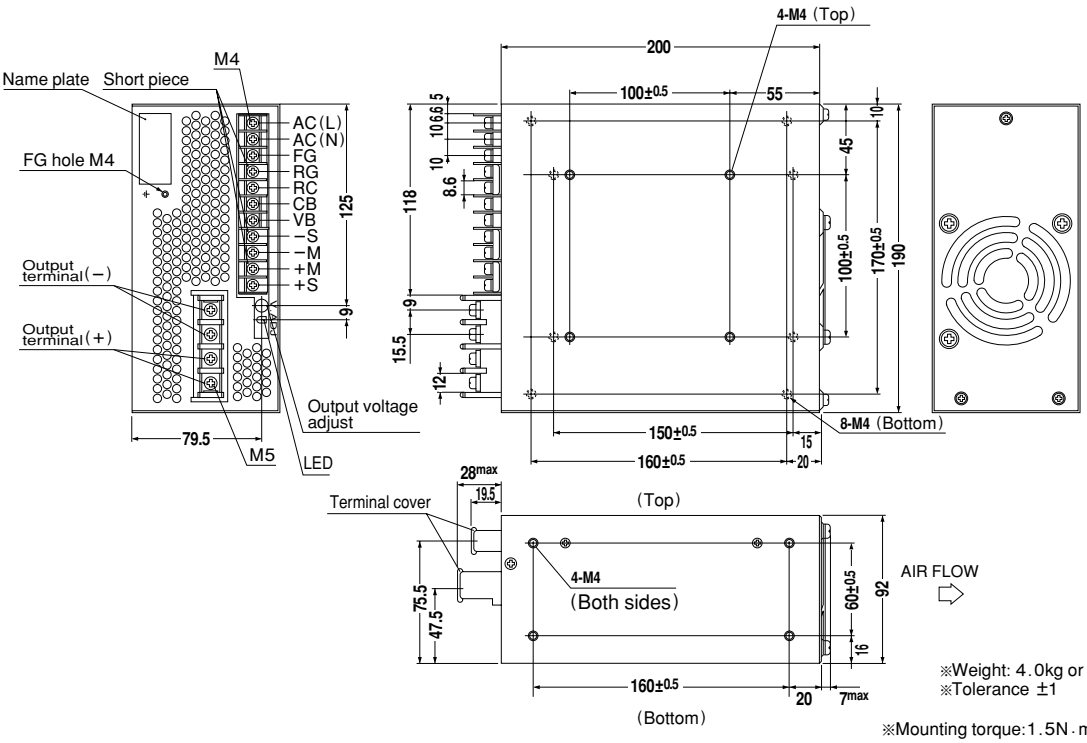
MODEL	PAA600F-3	PAA600F-5	PAA600F-12	PAA600F-15	PAA600F-24	PAA600F-48
MAX OUTPUT WATTAGE[W]	360	600	636	645	648	624
DC OUTPUT	3V 120A	5V 120A	12V 53A	15V 43A	24V 27A	48V 13A

SPECIFICATIONS

	MODEL		PAA600F-3	PAA600F-5	PAA600F-12	PAA600F-15	PAA600F-24	PAA600F-48
INPUT	VOLTAGE[V]		AC85 - 264 1φ or DC120 - 340					
	CURRENT[A]	ACIN 100V	5.4typ	8.2typ				
		ACIN 200V	2.7typ	4.1typ				
	FREQUENCY[Hz]		50/60 (47 - 63)					
	EFFICIENCY[%]		70typ	76typ	80typ	81typ	83typ	83typ
	POWER FACTOR	ACIN 100V	0.99typ (Io=100%)					
		ACIN 200V	0.95typ (Io=100%)					
	INRUSH CURRENT[A]	ACIN 100V	20typ (Io=100%)					
		ACIN 200V	40typ (Io=100%)					
	LEAKAGE CURRENT[mA]		0.75max (60Hz, According to UL, CSA, VDE and DEN-AN)					
OUTPUT	VOLTAGE[V]		3	5	12	15	24	48
	CURRENT[A]		120	120	53	43	27	13
	LINE REGULATION[mV]		20max	20max	48max	60max	96max	192max
	LOAD REGULATION[mV]		40max	40max	100max	120max	150max	300max
	RIPPLE[mVp-p]	0 to +50℃ ＊1	80max	80max	120max	120max	120max	150max
		-10 - 0℃ ＊1	140max	140max	160max	160max	160max	200max
	RIPPLE NOISE[mVp-p]	0 to +50℃ ＊1	120max	120max	150max	150max	150max	200max
		-10 - 0℃ ＊1	160max	160max	180max	180max	180max	300max
	TEMPERATURE REGULATION[mV]	0 to +50℃	40max	50max	120max	150max	240max	480max
		-10 to +50℃	50max	60max	150max	180max	290max	580max
	DRIFT[mV] ＊2		12max	20max	48max	60max	96max	192max
	START-UP TIME[ms]		500max (ACIN 85V, Io=100%)					
	HOLD-UP TIME[ms]		20typ (ACIN 100V, Io=100%)					
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		2.85 - 3.45	±10%				
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically					
	OVERVOLTAGE PROTECTION		4.00 - 5.25V	Works at 115 - 140% of rating				
	OPERATING INDICATION		LED (Green)					
	REMOTE SENSING		Provided					
	REMOTE ON/OFF		Provided					
ISOLATION	INPUT-OUTPUT · RC		AC3,000V 1minute, Cutoff current = 10mA max,DC500V 50MΩ min (At Room Temperature)					
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA max,DC500V 50MΩ min (At Room Temperature)					
	OUTPUT · RC-FG		AC500V 1minute, Cutoff current = 100mA max,DC500V 50MΩ min (At Room Temperature)					
	OUTPUT-RC		AC100V 1minute, Cutoff current = 100mA max,DC100V 50MΩ min (At Room Temperature)					
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +65℃, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max					
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max					
	VIBRATION		10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis					
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis					
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS		UL60950-1, EN60950-1, EN50178, CSA C22.2 No.60950-1 Complies with DEN-AN and IEC60950-1					
	CONDUCTED NOISE		Complies with FCC-B, CISPR22-B, EN55022-B, VCCI-B					
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2					
OTHERS	CASE SIZE/WEIGHT		190×92×200mm (without terminal block and screw) (W×H×D) /4.0kg max					
	COOLING METHOD		Forced cooling (internal fan)					

＊1 According to 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN : RM101).
＊2 Drift is change in DC output for an eight hour period after a half-hour warm-up at 25℃, with the input voltage held constant at the rated input/output.
＊3 Please contact us about safety approvals for the model with option.
＊ Avoid prolonged use under over-load.

External view

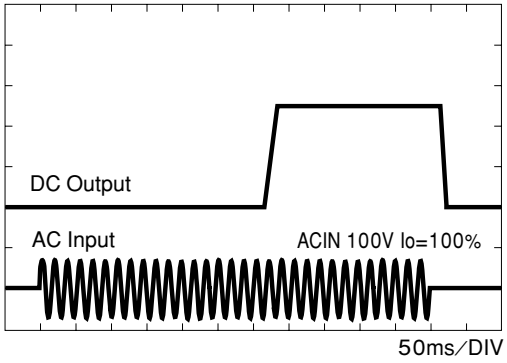


※Weight: 4.0kg or less
※Tolerance ±1

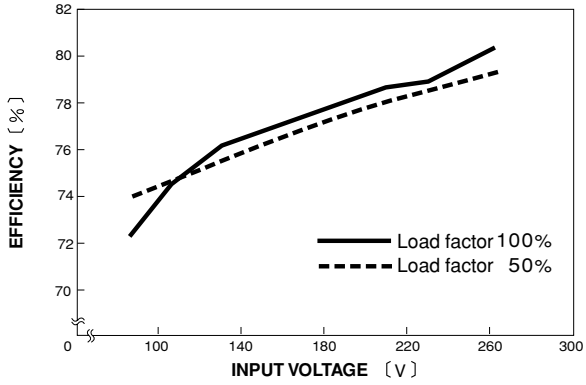
※Mounting torque: 1.5N·m (16kgf·cm) max

Performance data

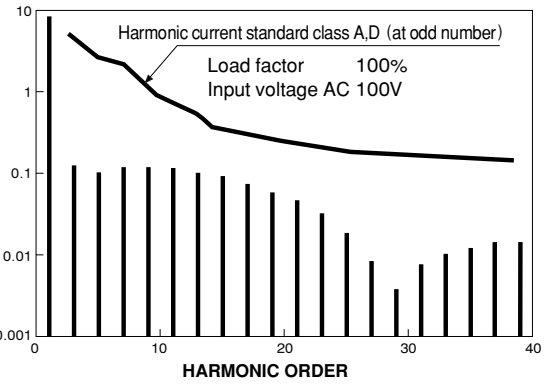
■RISE TIME & FALL TIME (PAA600F-5)



■EFFICIENCY (PAA600F-5)



■HARMOINC CURRENT (PAA600F-5)



■HARMONIC CURRENT (PAA600F-5)

