APD 90 A

Aksa
Aksa
P 602

CE

∂ √ ∧ √ 3 ⊞♨|∮∪∨, 50 ⇨♨, 0,8 PF

⊞√∴:≫‖∮∨|	←|∧|:∞∮√≫ ∬∴≡∮∴::~≦		⊞::∮∴∞∮√≫ ∬∴≡∮∴::~≦		
	∪⇧⇧.	∪⇧~.	∪⇧⇧.	∪⇧~.	Amp
400/230	93,00	74,40	85,00	68,00	123,00

←|∧|:∞∮√≫ ∬∴≡∮∴∷∷≦∷∮∷∬:‖∥√∬| (ESP) :√∝∷~≥ ∞∷∷∴∷~∘ ~∷∞∨∨∷∷ ISO 8528 ∷| :|∟∾∪∮|∠∷∷∷~∨∬√.

⊞::∮∴∞∮√≫ ∬∴≡∮∴∷∷≦∞∷∮∷∮∷∬ :‖∥√∬| (PRP): :√∝∷~√∞⊿ ∨∷∮∮∴∮ :‖∥√∬| ∷∷∨∷| :|∬∮∮.∩∮√∟∾∪⅃, 24 ≒∨:√∞:⊳∪∨∞∷∷∷~∘ ~∷∞∨∨∷∷ ISO 8528, ∠∷∷∷~∨∬√∷| :|∟∾∪∨ ∞10% ∞∮┤∮∮∨ 1 ≒∧√12 ≒∞∷∷∷~∘ ~∷∞∨∨∷∷ ISO 3046.

Standard Specifications

⊩∨∧∫∮≥∩∠∾∨∟∮∫∫≦∷∷∷∠≥∫∮:∮∧⊿∮∨∣∬, ⊿≫∨:∷∷∣≦∧:∞∨∮∨∞∞∾≫|∫∫≥≈∝∫:∞∨≫
:√∠∨∨~∷∷:∬∫| ∾∮∨∮∣:∪∨∬∮∮∮~∮∮≫~∷:∷∬
⊞∾∫∮∨∮∮∨≫:∣≠∣┤∪∾∮∮∮~∷∨∨∞∷√≒∨≪≡∨∾:≫⊿~∨∬∣∩
∑∣∪∷∨∮|∷∪∩∷~∮┤┤∨∧∨∮≥∮∮:∷∷∞∾∷∨∫≒∮∮√∷∷∷√
⊞∾∮∷∷∩√∪∮∬∮∮∮∮≫∷∷∷∷(∷∞∾∮♨∷∷∮∫∮∷≥∩∷∷∪∾∮∫∣≫∮∫∨
⊢∷∥∾∠∾∨∟∮∫∫≫
∈∫∨∮∟~∷∮∮∨∾∮∷∮∷∬≥
⊩∞∮∮∮∷∩∷∷∥≠∨∮∮∨∪⅃∮∣∷∨~∷∷, ⋃∮∷∷H
∈∞∬∷⅃∮∨∮∫∫≦∨∟∨∞∪∪∩∷~∨∮∮∷∩∮∮∷∷∮∮∷√∮∮≫≪~∷≫∷~⅃∫∮∫∮.
∧√∷⅃∮∮|∮∞∷∷∷∩∷∞∾.
←∷∪∷∾∠∾∞∷∷∪∨∷∷∫∮∮≦∧∞∾∮∮∨≪∨∞∷~∾∮∮∷∝∷⅃
⇨∷√∮∮∮∷∷∷∷∮∮∨:√∬√∨∨∧∮∫≫∷∷≥
⊦∷∮∫∮∷≥∩∞∾∪

⇧≥∝∴: ∠∴∷∷∮∫∮∨~|∫≦∮≥≈ ∴∷∷♨∨∩

⊩⇧⇧⇩⇨⇧⇦∾∐
- ∂∨∮≦∷: ∷∷~⅃∫∮∮∨≫∞∷∮∮∮∐≡ :√∪♨∨∨ ∷∷~~∷∮∮∫ ∨∞∾√
- ⊞∷∠∷∟∷| ∞∬√∷∮√

ALTERNATOR
- ⊞∷∷~∨∞∾∷∪∮∮∮⅃∮∮∨∮∮≥∩∷∷∝∷∟∷| ∞∨┤∫≦
- ∇| ~≥:| ≈∷∷∷∞∷∷⅃∮∨≫∷∷∨∷∮| ∬√≡ √∧
- ⇧≥≈∷⅃∮∨∷∩∨∞∞∷∷∬√~∧∨≡∨~≥

⇨|⇨⇦⇨∐⇧⇧ ⋁⊞←⇧⇧∐⇨∐⇧↥⋆
- ←∷∷∪∨∷∷∷⅃∮≪∮∮∨≫∧√∧∮∫∫∮∮∮∨≫
- ⊞∞∾∨∮∮∮∷∷~∨∮√∬∷| :∫∫∮~:

⊞::∴≒∨|√∪∷∷|∷∷∷∞√:≥
- ⇧∞∷∷∬√~∨∮:∪∨≫:∷∷∮∮∮∬√∷∷∠∪≒∪∨~∷∷∮∫∨∞√
- ⊞::∷∷∮∨|∷∞∷:∟∷∷∮∫∨∞√∬√∷∮√
- ⊩√~≒∨∪∨∷∷∷∞∮≫~∷∷∮∫∨∞√
- ⊦∮∮∨┤∮∫≦
- ←∷∥∾∷∞∾∮∨~∨∮∷∷~√~∬∷∷≡|∷∮≥≈∷∷√∪∪∷∞∨≠∷∞∮∷∪∐|∮∨|
- ⊞∷∨≒∷∷
- ⊣∮≈∷∷∬∷∮∮|∪∪∷∷∷┤≈∝∾∷∠∿)
- ←∷∮∮~∷∷∫≦~∷∪∨∧∨∷≫∠∪∨

TRANSFER SWITCH
- ←∷∨∷∷∫≪∷√∪∷∮√∬~√∪∷∷∷√
- ∇| ~≥:| ≈∷∷∫≪∷∮∨∪∷∩∨∮√∬~√∪∷∷∷∷:
- ∞≥⅃≪∷√∟∮∫∫≦∠∾∨∟∮∫∫≫

APD 90 A

~∞√⌐┤∫ ≦   Aksa
⇑ ≦ :∮√~∴:Aksa
→∨:~⌐ ∫∫√
∽∴:√∾∮│∮∨≫   P 602

● ∃√ : √∪~ | : ∨ ∷ ~ ∨∪√ ∠ ∨∧|∫≦∮≥ ≈ ∠∞∨∟√ ~|∫|∩

Manufacturer		Aksa
Model		A4CRX46TI
↔√∪∷∨∫∫√∫≦∮√≫ ∠∴∷∴∮∨~|∫≦∮√≫ ∫∫∴		**1500 ∴∝./∫∫∨∮.**
		86,00 U⇑~ [115,00HP]
↔∴∫∴‖∮∨│ ≌∨∫∨∮∠:∴∞	L	4,580
~∨√∫∫│~:∨≈∴∠∷∴:≠∮≫	∫∫∫.	110 X 125
→~│∷│∮≦∷∷‖√~∨≫		17:1
↔∴∫∫∨∮√∫≦∮≥│∴∝∴:∴~≥(∴∝/∫∫∨∮)	∴∝./∫∫∨∮	1500
↘∫∫∪∴∷∷~≦∫∫√∷∫√(↔.)	L	14,00
↔∝≤│∫∫∴≈∫√‖∠√≪≡|∩‖∨∠∪∴∷∷~∨	L	26,00
AbsorbedAirDischargeReSourceKey.Text	∫∫3/∫∫∨∮.	6,80
↔↔:∴∷∴∽∷∷∪∮√≫∷∷∴∷∴∴∝∮∴∷∷~≦∞∴∧∠ (∫∫3/∫∫∨∮.)	∫∫3/∫∫∨∮.	182,00√~∴:√
↔↔:∴∷∴∽∷∷∪∮√≫∷∷∴∷∴∴∝∮∴∷∷~≦∞≥≈∫∴	∫∫3/∫∫∨∮.	18,50
∑∫|∪~:∨≒|∷∷∪√≫∷∷∨∷∷~|∫∫√		24 V d.c.
←√∷∴≈∴∠~∴∷∫∨∞√	**Load**	∷:∨ 100%
	↔/≒√∷∷.	∧√∟:∞∧∪|
		19,30

● ↔∨∷ √∫≦~|:∮√~∴:√

↔↔:∴∨∧∞∴∠∨~|∫≦		Aksa
↔∴∠|∫≦		AK370
∇√∷~∴~√	Hz	50
↔∴≡∮∴∷∷~≦	U⇑⇑.	87,50
Cos ∂		0,80
←∴∫∨≒|∷∷~∞∴≅√∧		3
↔√∷∷≫‖∮∨│√∫≦~|∮√~∴:√(⇑)	⇑	400/230
↔↔∴U	A	126,00

● ←√∧∫∫|∷≥∨∞|∷

∴~∪∷≥~ ∟∷∷∴∨	⇑|∷ U∟.	~∫∨∮√(∫∫∫.) ∫∫∫.	∈∨∷∨∮√ ∫∫∫.	∞≥∷∴∴~√(∫∫∫. ∫∫∫.	↘∫∫∪∴∷∷~≦~∴∷∴∫∨∞∮∴∟∴∝∨ L
APD 90 A	1285,00	2150,00	1000,00	1590,00	195,00
⇨∷∽∷∷≥ U∴‖∞≈∴∫ U∟.	⇑|∷	~∫∨∮√(∫∫.) ∫∫.	∈∨∷∨∮√ ∫∫.	∞≥∷∴∴~√(∫∫∫. ∫∫∫.	↘∫∫∪∴∷∷~≦~∴∷∴∫∨∞∮∴∟∴∝∨ L
ASM 5	1620.00	3120	1070	1720	195

APD 90 A

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P 602 -

1. Main status display.
2. Display scroll button.
3. Page(information) button.
4. Common alarm indicator.
5. Status LED's.
6. Operation selecting buttons.

DSE, model 6020 Auto Mains Failure control module.
Battery charger input 198-264 volt , output 27,6 V 5 A (24 V) or 13,8 Volt 5A (12V)
Emergency stop push button and fuses for control circuits.

Components installed in sheet steel enclosure. Phosphate chemical, pre-coating of steel provides corrosion resistant surface. Polyester composite powder topcoat forms high gloss and extremely durable finish. Lockable and hinged panel door provides easy access to components.

Control panel is mounted on baseframe with steel stand. Located at the right side of the generator set (When you look at the Gen.Set. from Alternator)

The DSE 6020 is a standard control module for our generator sets up to 200kVA and it have been designed to start and stop diesel and gas generator sets. The DSE 6020 module has been designed to monitor generator frequency, volt, current, engine oil pressure, coolant temperature running hours and battery volts. Module monitors the mains supply and switch over to the generator when the mains power fails. The DSE 6020 also indicates operational status and fault conditions, Automatically shutting down the Gen. Set and giving true first up fault condition of Gen. Set failure.The LCD display indicates the fault.

Microprocessor controlled.
LCD display makes information easy to read.
4-line, 64 x 132 pixel display.
Automatically transfers between mains (utilty) and generator power.
Manual programming on front panel.
User-friendly set-up and button layout.
Front panel programming.
Remote start.
Event logging (10)showing date and time.
Controls: Stop/Reset, Manual, Auto, Test, Start, buttons. An additional push button next to the LCD display is used to scroll through the modules' metering displays.

aksa POWER GENERATION

APD 90 A

Ҡ∞∨L√┤∫≦ Aksa
⇧≦┤:ƒ√~∴:Aksa
→∨:┤∫∫√
∽∴∶√∾∫|ƒ∨≫   P 602

● ⇕∧∫∫|:∨~|∫≦ƒ≥|∵∵:∨∝∴∶≥

ENGINE
Engine speed.
Oil pressure.
Coolant temperature.
Run time.
Battery volts.
Configurable timing.
GENERATOR
Voltage (L-L, L-N).
Current (L1-L2-L3).
Frequency.
MAINS
Voltage (L-L, L-N).
Frequency.
Mains ready.
Mains enabled.
Gen. Set ready.
Gen. Set enabled.

● →≈|∫∫√∧√≡∨~≥

WARNING
Charge failure.
Battery Low/High voltage.
Fail to stop.
Low /High generator voltage.
Under/over generator frequency.
Over /Under speed.
Low oil pressure.
High coolant temperature.
SHUT DOWNS
Fail to start.
Emergency stop.
Low oil pressure.
High coolant temperature.
Over /Under speed.
Under/over generator frequency.
Under/over generator voltage.
Oil pressure sensor open.
Coolant temperature sensor open.
ELECTRICAL TRIP
Generator over current.

● ⇶∵≌∨∴ƒƒ≥|∴∶∴∝|ƒƒ∴∶∶~∨

Flexible sensor can be controlled with temperature, pressure, percentage (warning/shutdown/electrical trip)
Local setting parameters and monitoring from PC to control module with USB connection (max 6 mt).

● →~√ƒ∠√:~≥

Elecrical Safety / EMC compatibility BS EN 60950 Electrical business equipment.
BS EN 61000-6-2 EMC immunity standard.
BS EN 61000-6-4 EMC emission standard.

● ⇶:∨∝∴:∠∫≫∧√:≫∠U∨√UU∽∫∫∽∫≫~∴:√

Battery charger is manufactured with switching-mode and SMD technology and it has high efficinecy. Battery charger models' output V-I characteristic is very close to square and output is 5 amper, 13,8 V for 12 volt and 27,6 V for 24 V . Input 198 - 264 volt AC. Proline 2405 has fully output shot circuit protection and it can be used as a current source. Proline 1205/2405 charger has high efficiency, long life, low failure rate, light weight and low heat radiated in accordance with linear alternatives. The charger is fitted with a protection diode across the output. Connect charge fail relay coil between positive output and CF output. They are equipped with RFI filter to reduce electrical noise radiated from the device. Galvanically isolated input and output typically 4kV for high reliability.

APD 90 A

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⇑ ≦┤ :ϕ√~∴:Aksa
→∨:┤ ∬√   P 602
∽∴:√∞ʃ|ϕ ∨≫

ASM 5 - ∪∴∥∽≈

1	Steel structures.
2	Emergency stop push button.
3	Control panel is mounted on the baseframe . Located at the right side of the generator set.
4	Corrosion-resistant locks and hinges.
5	oil could be drained via valve and a hose
6	Exhaust system in the canopy.
7	special large access doors for easy maintanance
8	Base frame -fuel tank.
9	Lifting Points.
10	sound proofing materials.

⊪ ~ ∴ ∞ √ : |

"∈ ⍚∬∴∨∧∫ ∨:∝≪≡∨| ∨ ∧√≡ ∨≡ √≪≡ ∨| ∴~√~∬∴∷≇ | :ϕ≥≈∞∴⋏⅃ ∩∴∞∨∩∴∴∪:≥~∨≫⅃ϕ| :√~∴:ϕ ≥≈⍚∴~√ϕ ∴∞∴∪∪∴∬∴√ϕ ∨∨ ⇑↔⇑ ⍚∠∴∘| ∖∞∴∷≫≪~ ∧∞∞∪∴∞≥∬ ~∴| ∝∴∞∨ϕ ∨≫∬ ∨∴∝| ∴∴╎ ≒∨∞√≪~∴∴~∨∬√ϕ ≦ ⍚≪ ∧√≡∨~∽∴~√~∬∴∷≇ | :ϕ≥≈ ∞∴⋏⅃ ∩∴∞∨∩→∴| ≌∨√∬ ≦∴:∨∧∴√∝∴~√ϕϕ≥| ∪∴∥ ∝≈∨(8 - 275 ∪⇑⇑) ∨⅃ ∨ʃ ≦∴∴∴∠≥∠≫~⅃ ≫∴∪~:≥~∴∩⅃ϕ| :√~∴:ϕ∴∩ ⍚∴~√ϕ∴∞∪∪ ⅃≫∴∝| ∴∴╎ ≒|ϕ∨≫ʃ|∪∪∴∵∠∴∴~∽∴√∴∴∨∴| :∞∨:ϕ∴∬∨∪⅃∴√ϕ ~∨ϕ∴∬∴∞∴ʃ∘|| ∨∞∨ϕ∨∨, ∞∧√∨∬∴∧∨∬|ϕ≫|∬≥| ∪∴∬∴∷ϕ|ϕ~≥∴∴∧∞∴ʃ≫≪~∞≥∴∴ʃϕ∨~≦∴|∬∴ϕ~ϕ√∬∬∴∷⅃╌⊪∴∪:≥~∨| ∴∴∴∴| ∪~∨∴∞∞ϕ∴∴~√∪∨∬∴∝∴√∧∴∬∫≒~∴∝≥ ∴∴~∨∬∨∧∨∴∴∞∨~≦≩≡|∪~∨∞ϕ∴∴~≦∴∴ʃ∨||⅃ϕ∨≫⅃ϕ|:√~∴:ϕ∴∩∝∴~∨ϕ∴∞∪∨."

→ ~ √ϕ∠√ : ~ϕ≥| ∷∴:|≌∨≡∨∪√≌∨∨

⊪| ∝∴ʃ≦∴∴∩∴√∧∬| ∷∪∴∴∴∝∴√∴ϕ∨∧∪∴∴∴≇ ∨ʃ≦≥∩∠∨∧∨ϕ
↔∴∴∴∷∴ ⅃ϕ| :√~∴:ϕ∨≫∷∴~√ϕ∴∞∪∨∧ ∞≥≡ʃ∴∴ϕ∨≫∴∨∴╌ ∬√∴:∷| ∠∞√:∨~| ʃ≦≥∴∴∴∝:∨ϕ≥, ∝∪≪≡|ϕ≥∞∪∴∬∴ʃ|∪~∴∴∴~√∝∪∨
↔∴∴∴∴∷∴∨∧∠~∴∘ϕ|ϕ ∨∧∴~√ʃ∨, ∴~√ʃ≦∴∝∴√∝∴~√ϕ√∴∴∴∴≠∪∴∞≥∬ ∬√~┤ :∨√ʃ∴∬
∴ʃ √∬∬| ∴∴~√ϕ√∞ʃ∨∞√≪≡∨≫∴|ϕ√
→| ∪∨∩∠∴∴~∽∴∪∴∞∴| ∬ ∴∴∞ʃ∪~√∬∴∴∝∴ʃ∘|| ∨∞∨ϕ∨≫
⇑≥≡ʃ∴∴ϕ∨≫∴:∨∴┤ ∬√∞∪∴∥∝≒|
⇑∴ʃ≦∴∨| ∠∘ʃ :∨ϕ√∪∥ ∠∴∩∴~∴∴∴ϕ|
⊪∪ϕ∴∴∪∴ϕ~∴∴ʃ≦∴∴∴∩∴√ϕ|ʃ ∨∞∧∨∪:≥∞∨√≪≡|∩∴≫∠∘ʃ :∨
↔ϕ∴∴∴∪∨√∞∨∴:∨∩ϕ∴∩∴∴∴~√ϕ∴∞∪∨ϕ√≈∴∠∨~∴≫∴∴∞ϕ|≠ϕ|∩∴~∴∴∴ϕ≥∪∴∴∴∴√
⇑ ≦┤ :ϕ√~∴:∘ϕϕ~∫≫∴∴∴∨∨∨∪∪∬ʃ∘ϕ≫∴∴∴√∧∨∪:≥~⅃≫∠∴∴∞∴√
Ʀ∴∴∴~∴∪∨∪∪ʃϕ√≫∴∴∞∨∪∪~∴ʃ∨∞ϕ∴ʃ∬∞∝∨∪∪~∴ʃ≦∪∴┤╎| ∧∧∨∪:≥∞∨≪≡∝≪:≫∠∘ʃ :≦
↔∴≒∪∨∴∴∠≦| ∬√ϕ√∷∴∴∴ϕ∴∩∴√∬∬|
Ʀ√ϕϕ≥| ∷∴∴≌∨∨∴∴∘ʃ ≒√≪~⇑≠∨∬∷∴:| ∝∴∞∨ϕ∨≫∬

∈∨ : ∨ϕ√	∬∬.	1070
Ʀʃ∨ϕ√(∬∬.)	∬∬.	3120
∞≥∷∴∴~√(∬∬.)	∬∬.	1720
⅄∬∪∴∷∷~≦ ~∴∴ʃ∨∞ϕ∴∟∴∝√∪√	L	195