

UE2 / UE21

Fire Booster Set



Designation of Fire Booster Set

UE2 12/70-XVM 10-10/4

UE2: 1 main + 1 stand-by electrical fire booster set

12: Rated Flow in m³/h per pump in the set

70: Rated pressure in mWC

XVM 10-10: Vertical, inline multistaged, stainless steel centrifugal pumps Series of EBITT-XVM

4: Motor power in kW

UE21 12/70-XVM 10-10/4 + DJ-XVM 1-15/0,75

UE21: 1 main + 1 stand-by + 1 jockey pump electrical fire booster set

12: Rated Flow in m³/h per pump in the set

70: Rated pressure in mWC

XVM 10-10/4: Vertical, inline multistaged, stainless steel centrifugal pumps Series of EBITT-XVM

DJ-XVM 1-15/0,75: Jockey pump set, stainless steel pumps

Construction

Fire booster sets constructed for automatic pressurization units to be used for the fire cabinets' installations in apartment buildings, and domestic use.

Units are fitted with a jockey pump with which the system pressure level can be maintained without having to start the main pumps.

Operation

The pumps start operating after a fall in the pressure level in the fire extinguishing system.

The first pump to be triggered is the jockey pump in UE21. If this pump cannot restore the pressure level, then one of main pumps starts.

Since there is more than one main pump, the pumps start in cascade sequence with the starting pressure switches set at different pressure levels.

The pressure switches of the main pumps are used for automatic starting and automatic stopping. The membrane type of expansion tank with the

capacity of 24 liters-16 bar execution is being mounted in fire booster set for the absorption of water hammer.

Pumps

Main pumps are:

XVM Series: Vertical, multistage, inline, fully stainless steel execution with mechanical sealed.

Jockey Pump is:

XVM Series: Vertical, multistage, inline, fully stainless steel execution with mechanical sealed.

The maximum pressure developed by the jockey pump is always greater than the pressure of the main pumps.

Electric Motors:

- 2-pole induction type, 50 Hz, n=2900 rpm, IEC standardized, TEFC Type
- Three-phase 230/400V +/-10% up to 3 kW, 400/690V +/-10% 4kW and higher
- Insulation Class F
- Protection Class IP55
- Construction in accordance with IEC 60034
- Other voltage and frequency ratings and ambient temperatures available on request.

Hydraulic Components

- All pumps in the system are being delivered on a common base plate with suction and discharge manifolds
- Each pump in the system has its own ball valve at suction side, and ball valve and check valve at discharge side.
- Outlet manometer fitted on discharge manifold.
- Pressures switch one for each pump in the unit.

Electric Boxes

UE2 Fire Booster Set Controller is designed for controlling 2 fire pumps use.

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Technical Features

UE2

- Electronic control panel
- Input voltage 3~50/60 Hz 400V +/-10%
- Very low voltage input for float switch of stop
- Very low voltage input for 2 pieces pressure switch of start
- Very low voltage input for alarm signal
- Very low voltage input for 2 pieces motor Klixon
- Push-buttons for Auto-Off-Manual motor operation (manual temporary)
- Green led for power on
- 2 pieces green led for motors operating
- 2 pieces green led for auto operation
- Red led for water level alarm
- 2 pieces red led for overload motors protection alarm
- 2 pieces red led for alarm, motor's klixon active
- 2 pieces push button for restoration from protection
- Adjustable electronic protection for motor overload
- Time for activation of protection: 5"
- Auxiliary circuits protection fuse
- Motors protection fuses
- Alarm output with exchangeable contacts 5 A 250V(resistive load)
- Main switch with door interlock
- Single phase model adapted for the insertion of a capacitor (not included)
- Box in ABS
- Output with cable holder
- Protection IP55
- Ambient temperature: -5°C/+40°C
- Relative humidity 50% at 40°C (not condensed)

UE21

- Electronic control panel
- Input voltage 3~50/60 Hz 400V +/-10%
- Very low voltage input for float switch of stop
- Very low voltage input for 2 pieces pressure switch of start
- Very low voltage input for alarm signal
- Possibility to exclude pumps with internal dip-switch set-up
- Internal dip-switch set up for with or without "autoritenuta" operation
- Possibility to activate or disarm delay time of ammetric protection by internal dip-switch set-up
- Possibility to activate or disarm alarm output by internal dip-switch set-up
- Push-buttons for Auto-Off-Manual motor operation (manual temporary)
- Green led for power on
- 3 pieces green led for motors operating
- 3 pieces green led for auto operation
- Red led for water level alarm
- 3 pieces red led for overload motors protection alarm
- Push button for restoration for motors overload
- Time for activation of protection: 5"
- Auxiliary circuits protection fuse
- Motors protection fuses
- Alarm output with exchangeable contacts 5 A 250V(resistive load)
- Main switch with door interlock
- Single phase model adapted for the insertion of a capacitor (not included)
- Box in ABS
- Output with cable holder
- Protection IP55
- Ambient temperature: -5°C/+40°C
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Specifications



Model	Main Pump		Standby Pump				Diameter	
	Model	Power (kW)	Model	Power (kW)			Suction	Discharge
UE2 12/50	XVM 10-8	3	XVM 10-8	3			2½"	2½"
UE2 12/60	XVM 10-9	3	XVM 10-9	3			2½"	2½"
UE2 12/70	XVM 10-10	4	XVM 10-10	4			2½"	2½"
UE2 12/80	XVM 10-12	4	XVM 10-12	4			2½"	2½"
UE2 12/90	XVM 15-7	5,5	XVM 15-7	5,5			2½"	2½"
UE2 12/100	XVM 15-8	7,5	XVM 15-8	7,5			2½"	2½"
UE2 12/110	XVM 15-9	7,5	XVM 15-9	7,5			2½"	2½"

Model	Main Pump		Standby Pump		Jockey Pump		Diameter	
	Model	Power (kW)	Model	Power (kW)	Model	Power (kW)	Suction	Discharge
UE21 12/50	XVM 10-8	3	XVM 10-8	3	XVM 1-12	0,75	2½"	2½"
UE21 12/60	XVM 10-9	3	XVM 10-9	3	XVM 1-15	0,75	2½"	2½"
UE21 12/70	XVM 10-10	4	XVM 10-10	4	XVM 1-17	1,1	2½"	2½"
UE21 12/80	XVM 10-12	4	XVM 10-12	4	XVM 1-19	1,1	2½"	2½"
UE21 12/90	XVM 15-7	5,5	XVM 15-7	5,5	XVM 1-19	1,1	2½"	2½"
UE21 12/100	XVM 15-8	7,5	XVM 15-8	7,5	XVM 1-21	1,1	2½"	2½"
UE21 12/110	XVM 15-9	7,5	XVM 15-9	7,5	XVM 1-23	1,1	2½"	2½"

Model	Main Pump		Standby Pump		Jockey Pump		Diameter	
	Model	Power (kW)	Model	Power (kW)	Model	Power (kW)	Suction	Discharge
UE2 12/42	MV 1203	3	MV 1203	3			2"	2"
UE2 12/60	MV 1204	4	MV 1204	4			2"	2"
UE2 12/70	MV 1205	5,5	MV 1205	5,5			2"	2"
UE2 12/85	MV 1206	5,5	MV 1206	5,5			2"	2"
UE2 12/100	MV 1207	7,5	MV 1207	7,5			2"	2"

Model	Main Pump		Standby Pump		Jockey Pump		Diameter	
	Model	Power (kW)	Model	Power (kW)	Model	Power (kW)	Suction	Discharge
UE21 12/42	MV 1203	3	MV 1203	3	MV 705	1,8	2½"	2½"
UE21 12/60	MV 1204	4	MV 1204	4	MV 706	2,2	2½"	2½"
UE21 12/70	MV 1205	5,5	MV 1205	5,5	MV 708	3	2½"	2½"
UE21 12/85	MV 1206	5,5	MV 1206	5,5	MV 708	3	2½"	2½"
UE21 12/100	MV 1207	7,5	MV 1207	7,5	MV 710	4	2½"	2½"