Operating Manual

HPP09E Hydraulic Powerpack

From serial number 5745

Revised 13.04.2011



We thank you for choosing a HYCON powerpack.

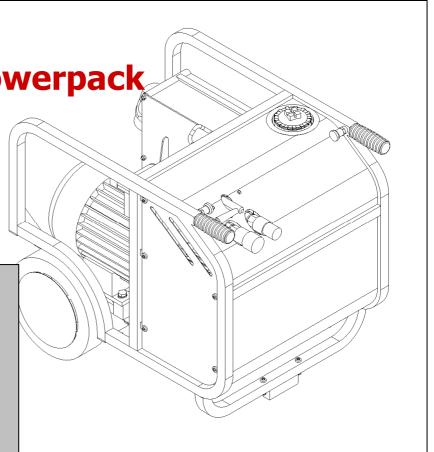
Please note that the powerpack is delivered without hydraulic oil, and therefore it must be filled up with hydraulic oil prior to operation.

To ensure smooth operation and long-lasting performance of your new powerpack, we recommend you to study this operating manual carefully and pay special attention to the

Safety and Service Precautions

We hope you will be satisfied with your new HYCON power-pack.

Best regards HYCON A/S





HYCON A/S

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Safety Precautions

- 1. Always use protective earplugs. The powerpack complies with the EU noise limits, but by daily long-lasting operation there is a risk of hearing defects.
- 2. Always connect hoses before starting.
- 3. Always keep the electric box, cables and sockets clean.
- 4. In case of non-operation or performance of service, always turn off the motor.
- 5. Never start the motor without side covers.
- 6. Operation of the powerpack without tool connected and with lever at "ON" may cause overheating of the system and damage to the powerpack.
- 7. When lifting the powerpack from a vehicle, we recommend the use of a crane.
- 8. The pressure relief valve is set at 150 bar from our plant. Never set it higher.
- 9. Always use filters with by-pass. The use of filters without by-pass may blow the hydraulic hoses and the filter cover.

Filling Up Hydraulic Oil

- To fill up with hydraulic oil, loosen the filter cover on top of the powerpack.
- Remove the filter element (see photo), and fill up with oil. When oil is showing at the bottom of the filter unit, there is enough oil on the powerpack.
- Insert the filter element again, mount the cover and the powerpack is ready for use.

Please note: When connecting new extension hoses, it is necessary to fill up with extra 2 litres of oil. Therefore always top up the powerpack when connecting new extension hoses.



Technical Data

Hydraulics

The HYCON HPP09E open centre hydraulic powerpack is designed in accordance with the EHTMA category C, which prescribes a minimum performance of 20 l.p.m. at 138 bar. The HYCON powerpack is fully compatible with and sufficient for the common European tools.

The powerpack is mounted with a pressure relief valve to avoid a too high pressure. Furthermore, the very efficient air cooling protects the powerpack against superheating.

Oil flow 20 l.p.m at 3300 r.p.m.

Working pressure nominal 120 bar

Pressure relief valve Set at 150 bar

Pump Gear pump

Oil temperature Max. 70° C

Hydraulic oil tank capacity Min. 5 litres/max. 7 litres

Hydraulic system compl. Max. 8 litres

Filter system (filter element) 25 Micron with by-pass

Motor Electric motor

5.5 kW, 3x400 V, 50 Hz Motor and electric box approved for IP55

Motor rotation Counterclockwise

(from oil cooler fan side)

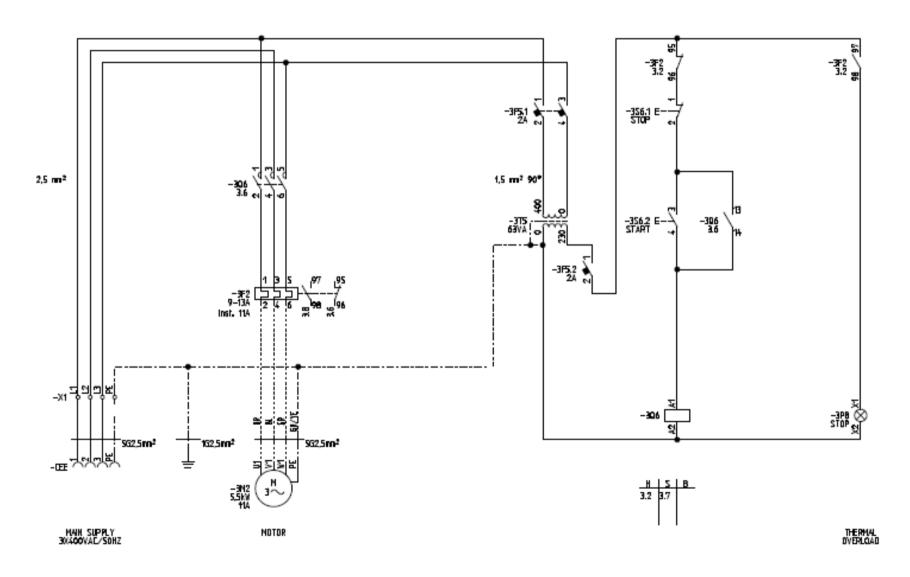
Fuse minimum 16 Amp

Guaranteed sound power level L_{WA} 97 dB **Sound pressure level 1 m L**_{PA} 85 dB

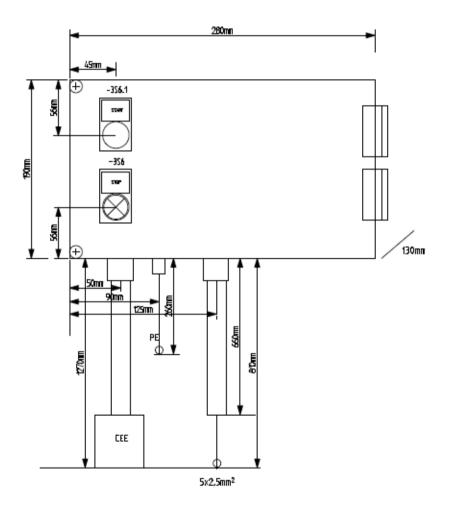
Dimensions (LxWxH) 680x560x593 mm

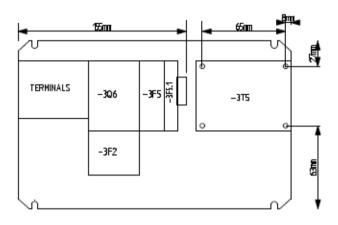
Weight, without hydraulic oil 80 kg

Electrical Circuit Diagram - Main Circuit and Control Circuit



Electrical Circuit Diagram - Components





Starting Instructions

Please observe the starting instructions on the electro box.

Start:

- Check hydraulic oil level at sight glass
- Connect hoses and tool
- Press the green button
- If the powerpack does not start, invert the phases in the socket by means of a screw driver
- Move the lever to "ON"

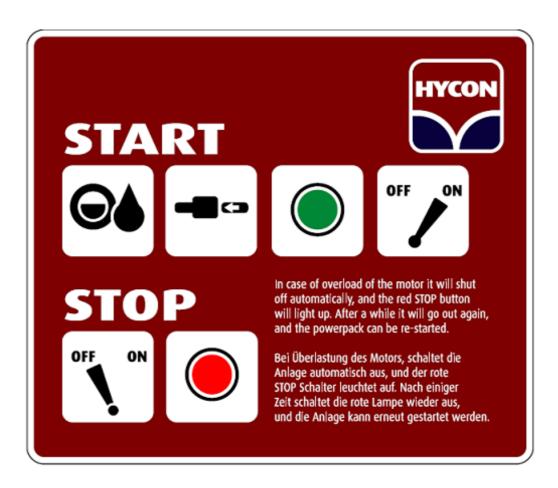
Stop:

- Move the lever to "OFF"
- Press the "STOP" button

The powerpack is not equipped with a phase inverter. If the motor does NOT start, the phases must be inverted in the socket. Also see above under "Start".



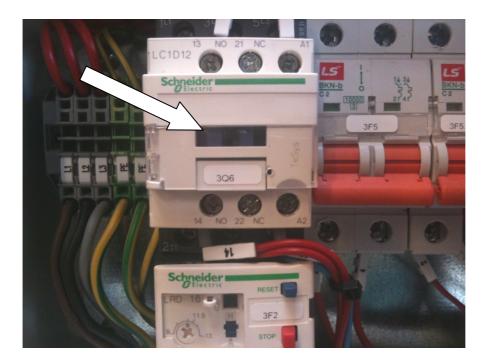
Motor Rotation: Counterclockwise (from oil cooler fan side)



Short Circuit

If the motor stops due to a short circuit (water), malfunctioning etc., the fuse in the relay might need to be reset.

- 1. Open the electrical box
- 2. Open the clear door on the relay (3Q6)
- 3. Push the blue fuse to reset the relay (see picture)



Service, Maintenance and Hydraulic Settings

Service/Maintenance	Daily	Weekly	Yearly
Engine oil	Check		1 x replacement
Hydraulic oil	Check		1 x replacement
Hydraulic oil filter *)			1 x replacement
Check hoses		(tighten up if needed)	
Air filter			1 x replacement
Fuel filter			1 x replacement

^{*)} Use only filters with by-pass

Hydraulic Settings

Check the working pressure by means of test equipment. The test equipment must comprise a pressure gauge, a flow meter and a valve for adjustment of pressure.

The pressure relief valve is placed on the right side of the valve block.

1. Connect the test equipment, start the powerpack and move the lever to "ON". Then close the flow valve - the pressure gauge must show 150 bar.

Adjust the pressure relief valve by loosening the lock nut and turning the adjustment screw in or out. "In" increases the pressure, and "out" decreases the pressure.

Retighten the lock nut after adjustment.

2. When the pressure relief valve has been adjusted correctly, the working pressure must be set at 100 bar by means of the valve on the test equipment. At 100 bar, the oil flow should be 20 l. p.m.

If correct pressure/oil flow cannot be achieved by following the above instructions, the powerpack must be re-adjusted. If the pressure/oil flow is then still incorrect, the pump is defect and must be replaced.

Oil Types

The HYCON powerpack uses standard hydraulic oil, i.e. all types of mineral oil and biodegradable oil, which comply with the following values:

Recommended viscosity	20-40 cSt
Permitted viscosity	15-1000 cSt
Viscosity index	Min. 100
Temperature area	-20° to +70° C

EC-Declaration of Conformity



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We hereby declare that

HPP09E hydraulic powerpack – from serial No. 5745

(with 5.5 kW electric motor)

is manufactured in conformity with the EC Directives: 2006/42/EC 2000/14/EC 2006/95/EC

Notified Body 1585:

AkustikNet A/S Frederikssundsvej 179 B DK-2700 Brønshøj Denmark

Guaranteed sound power level: 97 dB

HYCON A/S Juelstrupparken 11 DK-9530 Støvring Denmark

Henrik Steen General Manager

01.06.2003

Warranty Conditions

We grant 12 months warranty from the first date of operation – however, not more than 18 months from the date of delivery.

The warranty applies to faults that can be related to construction and production errors.

Faults caused by incorrect operation, incorrect handling, lack of maintenance or the like will not be accepted as warranty.

The warranty covers the parts necessary for repair and the suggested average time needed for repair.

For further warranty details, please contact your local dealer.