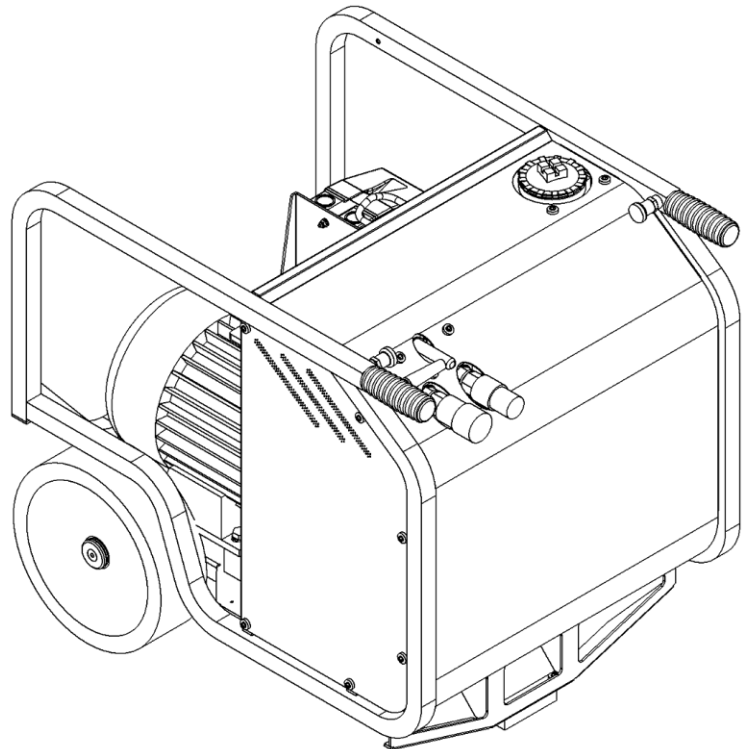


# Operating Manual

## HPP09E Hydraulic Powerpack

From serial  
number 13885

Revised  
22.11.2018



### Prior to Operation

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 powerpack.

Best regards  
HYCON A/S



**HYCON A/S**  
Juelstrupparken 11  
DK-9530 Støvring  
Denmark

Tel: +45 9647 5200  
Fax: +45 9647 5201  
Mail [hycon@hycon.dk](mailto:hycon@hycon.dk)  
[www.hycon.dk](http://www.hycon.dk)

# Contents

	<b>Page</b>
Safety precautions.....	2
Filling up hydraulic oil .....	3
Technical data.....	4
Electrical Circuit Diagram .....	5
Starting instructions .....	6
Service, maintenance and hydraulic settings .....	7
Oil types .....	8
EC-Declaration of Conformity .....	9
Warranty conditions .....	10
Spare parts list.....	11

## Safety Precautions



**DANGER:** The power pack must only be connected to an electrical power source with the correct fuse and fault current protection. If this is not observed, there is a risk of major personal injury or, in extreme consequence, death due to electric shock.



**IMPORTANT:** Read and follow this operating manual carefully to avoid personal injury and damage to the power pack.

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. Always connect the powerpack to a power source with the correct electrical protection.
5. Always turn off the motor and disconnect the power supply when the powerpack is not used and before performing any service.
6. Never start the motor without side covers.
7. Operation of the powerpack without tool connected and with lever at "ON" may cause overheating of the system and damage to the powerpack.
8. When lifting the powerpack from a vehicle, we recommend the use of a crane.
9. The pressure relief valve is set at 150 bar from our plant. Never set it higher.
10. 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

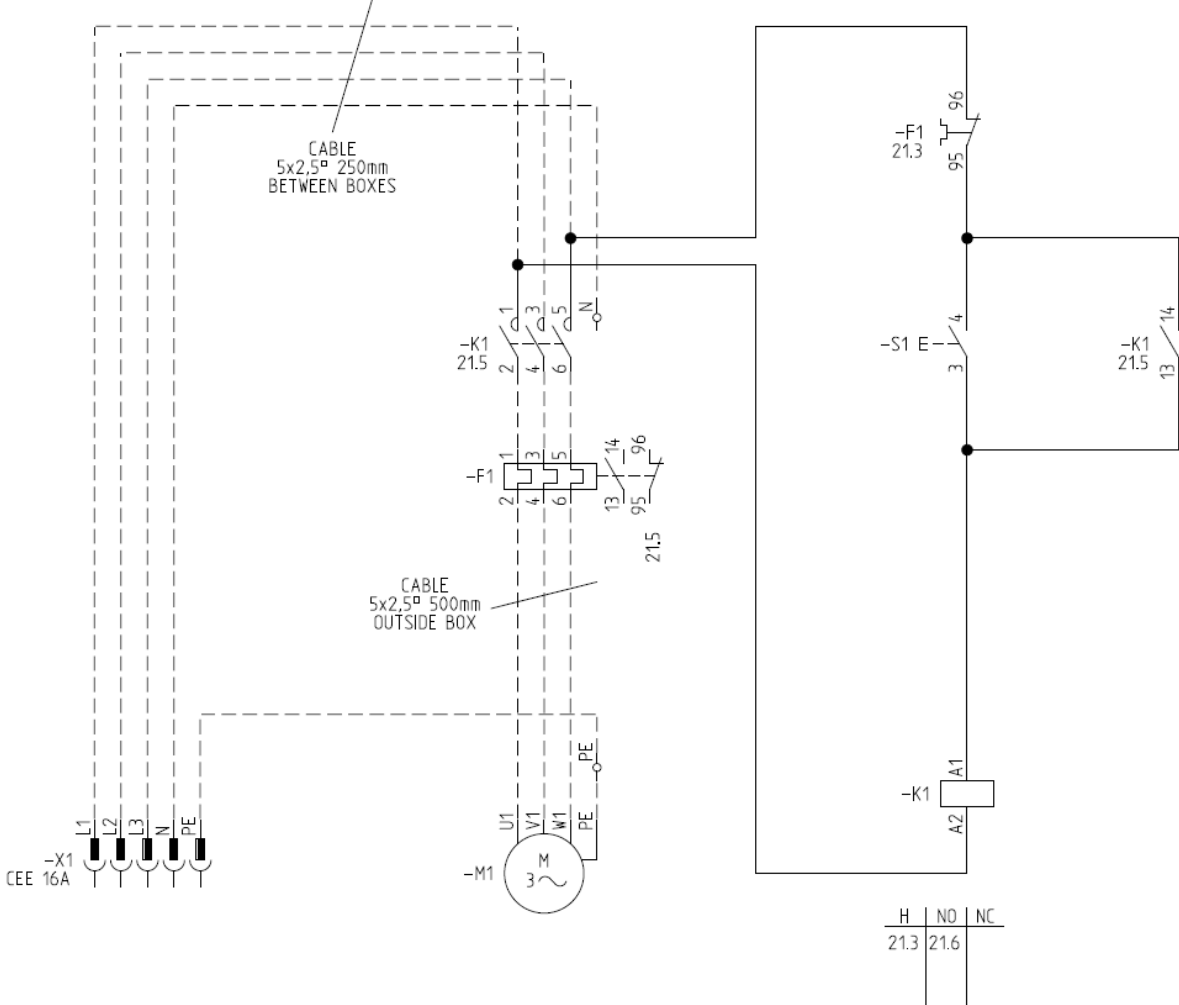
## Hydraulics

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 super-heating.

<b>Oil flow</b>	20 l.p.m at 2950 r.p.m.
<b>Working pressure nominal</b>	120 bar
<b>Pressure relief valve</b>	Set at 150 bar
<b>Pump</b>	Gear pump
<b>Oil temperature</b>	Max. 70° C
<b>Hydraulic oil tank capacity</b>	Min. 6 litres/max. 8 litres
<b>Hydraulic system compl.</b>	Max. 9 litres
<b>Filter system (filter element)</b>	25 Micron with by-pass
<b>Motor</b>	Electric motor 5.5 kW, 3x400 V, 50 Hz Motor and electric box approved for IP55
<b>Motor rotation</b>	Clockwise (seen from the back)
<b>Fuse minimum</b>	16 Amp
<b>Guaranteed sound power level <math>L_{WA}</math></b>	97 dB
<b>Sound pressure level 1 m <math>L_{PA}</math></b>	85 dB
<b>Dimensions (LxWxH)</b>	710x550x645 mm
<b>Weight, without hydraulic oil</b>	84 kg

# Electrical Circuit Diagrams



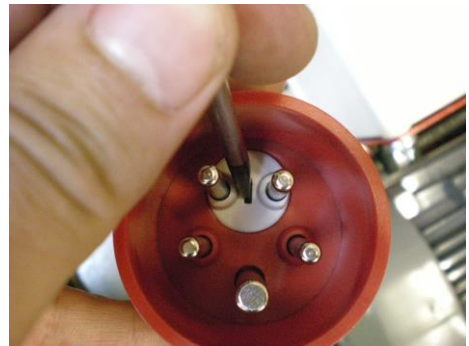
## Starting Instructions

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 motor's direction of rotation is wrong, 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 an automatic phase inverter. If the motor's direction of rotation is wrong, the phases must be inverted in the socket by means of a screw driver. Also see above under "Start".



**Motor's Direction of Rotation: Clockwise (seen from the back)**

# 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 power packs use standard hydraulic oil, i.e. all types of mineral oil and biodegradable oil, which comply with the following values:

<b>Ambient temperature range</b>	Below 10°C 50°F	10 ... 30°C 50 ... 68°F	Above 30°C 68°F
<b>Recommended oil viscosity grade</b>	VG 32	VG 46	VG 68

<b>Recommended oil cleanliness</b>		ISO 4406 /19/16 / NAS 1638 10
<b>Permitted viscosity</b>	cSt	10 – 600
<b>Viscosity index</b>	Minimum	100
<b>Oil temperature area</b>	°C /°F	-20 to 70 / -4 to 158



**HYCON A/S**  
Juelstrupparken 11  
DK-9530 Støvring  
Denmark

Tel: +45 9647 5200  
Fax: +45 9647 5201  
Mail [hycon@hycon.dk](mailto:hycon@hycon.dk)  
**www.hycon.dk**

## EC-Declaration of Conformity

We hereby declare that

**HPP09E hydraulic powerpack – from serial No. 13885**  
(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

A handwritten signature in blue ink, appearing to read "Martin Møller".

Martin Møller  
Managing Director

24.08.2018

## **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.