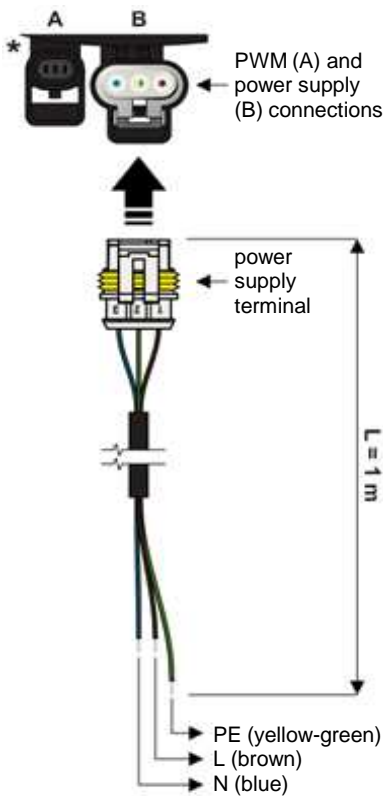


**LK 810 ThermoMat ECO+ Load Unit**

**LK 810 ThermoMat ECO**



**CONNECTION OF UPM3 Auto L PUMP:**



\* PWM control is not supported by UPM3 Auto L pump

**Power supply cable with terminal is included in supply.**

**Základní charakteristika**

Application	for heating circuits with solid fuel boiler and thermal store
Description	Load Unit mixes return water from a heating system or thermal store with hot water from boiler flow, keeping boiler return water at a given min. temperature; it is fitted with backflow preventer
Check valve function	permits boiler cooling by gravity circulation during power breakdown, preventing also thermal store cooling down via extinguished boiler
Installation	on boiler return pipe
Working fluid	water, water/glycol mixture (max. 1:1) or water/glycerine mixture (max 2:1)

Codes	max. boiler output
<b>15 046</b> for thermostatic element opening temp. 55 °C	<b>56 kW</b>
<b>15 047</b> for thermostatic element opening temp. 65 °C	<b>45 kW</b>
<b>16 244</b> for thermostatic element opening temp. 72 °C	<b>41 kW</b>

**Load unit data**

Fluid working temperature	2 - 110 °C
Max. working pressure	10 bar
Max. power input	52 W
Ambient temperature	0 - 70 °C
Power supply	230 V, 50 Hz
Insulation material	EPP
Overall dimensions	258 x 204 x 120 mm
Total weight	3,45 kg
Connection	3 x G5/4" F

**UPM3 Auto L Pump data**

**Electric data**

Power supply	230 V, 50 Hz
Power input (min./max.)	5/52 W
Current (min./max)	0,07/0,52 A
IP rating	IP44
Max. speed	5766 rpm
Weighted average power	≤ 25 W
Energy Efficiency Index	≤ 0,20 by EN 16 297/3
Motor protection	not needed

**Min. pressures at the pump suction port**

Min. pressures at the suction port to avoid cavitation	0,05 bar at 75 °C 0,5 bar at 95 °C 1,08 bar at 110 °C
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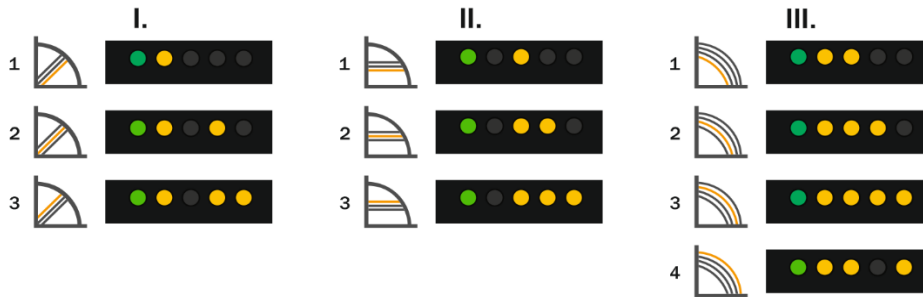
**Operating data**

Fluid working temperature	2 - 110 °C
Max. working pressure	10 bar
Ambient temperature	0 - 70 °C
Max. relative humidity	95 % non condensing

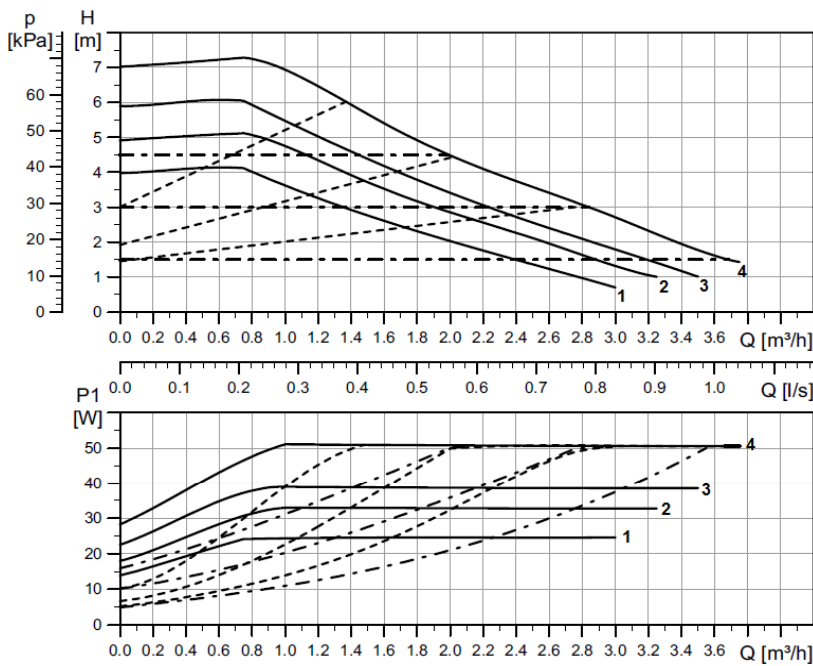
**LK 810 ThermoMat ECO+ Load Unit**

**Performance view during pump operation**

I.) proportional pressure, II.) constant pressure, III.) constant speed



**Performance curves for UPM3 Auto L**



Curve	Max. H (upper graph)	Max. P <sub>1</sub> (lower graph)
1	4 m	25 W
2	5 m	33 W
3	6 m	39 W
4	7 m	52 W

- a
- - - b
- · - · c

a) constant speed  
 b) proportional pressure  
 c) constant pressure