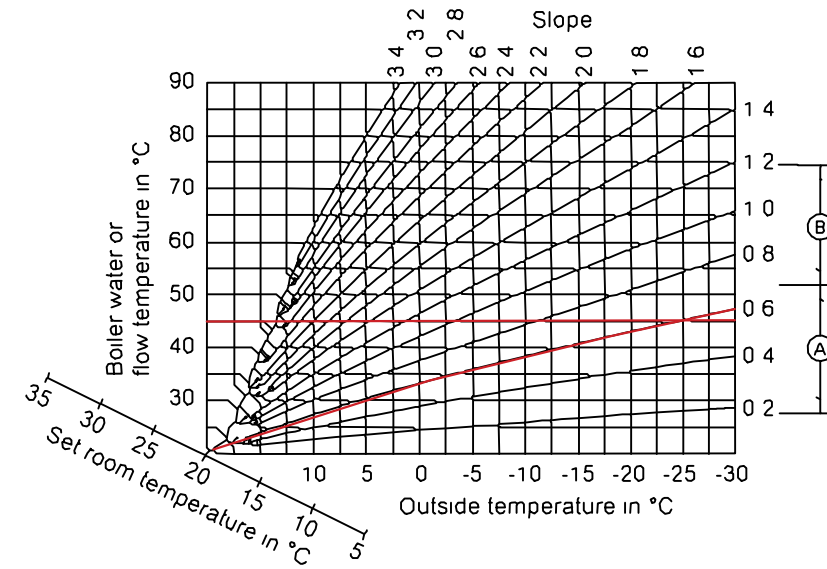


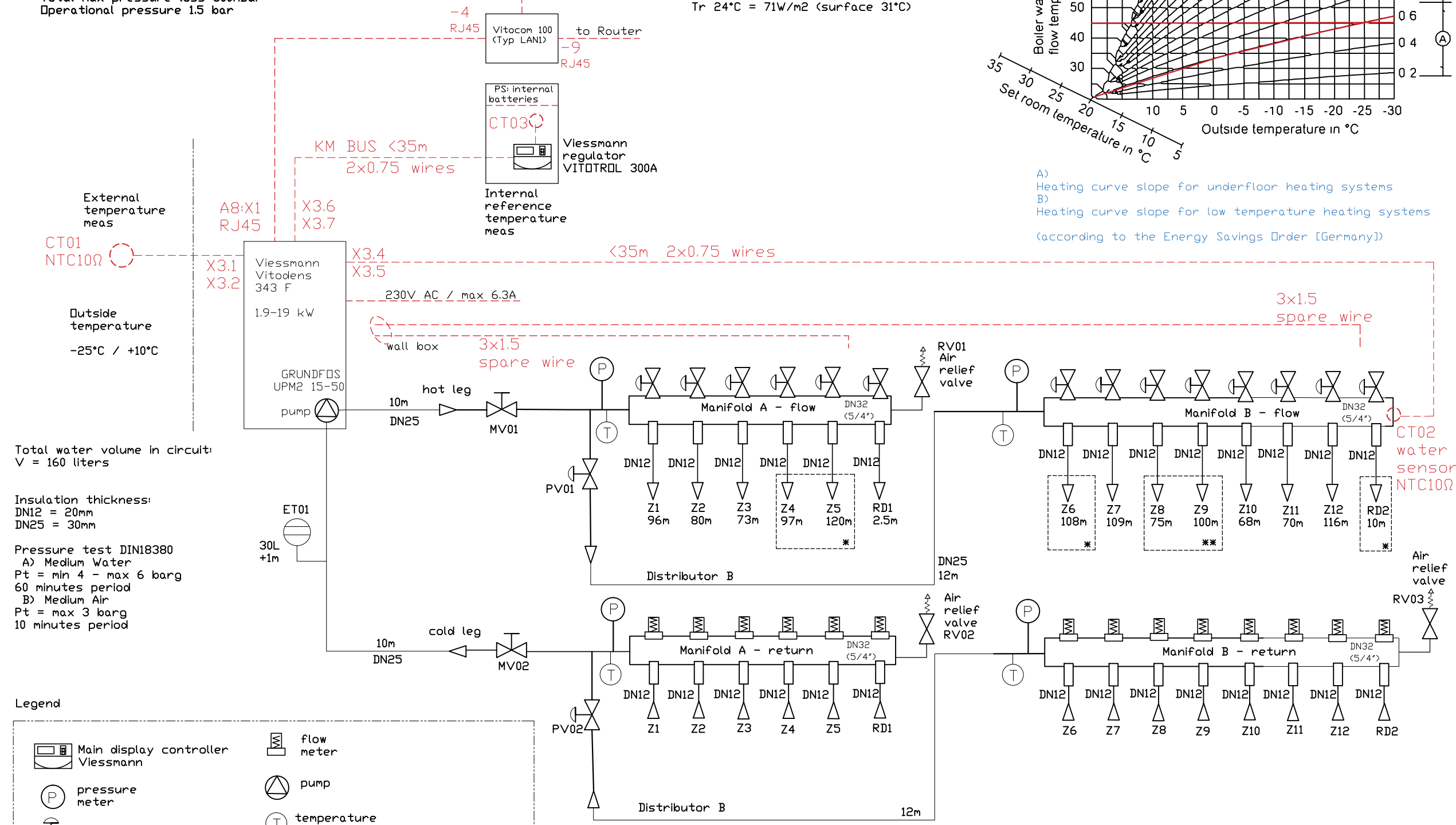
System of floors heating with boiler PWM regulation
Zone adjustment by manual valves

Mass flow
Q = 0.7 m³/h (700l/h)
Fluid Velocity 0.366m/s
Total max pressure loss 300mBar
Operational pressure 1.5 bar

Heating design temperature 45°C
Pipe spacing T=150mm
A) Ceramic floor heat flux
Tr 20°C = 139W/m² (surface 32°C)
Tr 24°C = 116W/m² (surface 34°C)
B) Carpet/parquet floor heat flux
Tr 20°C = 84W/m² (surface 28°C)
Tr 24°C = 71W/m² (surface 31°C)



A) Heating curve slope for underfloor heating systems
B) Heating curve slope for low temperature heating systems
(according to the Energy Savings Order [Germany])



Total water volume in circuit:
V = 160 liters

Insulation thickness:
DN12 = 20mm
DN25 = 30mm

Pressure test DIN18380
A) Medium Water
Pt = min 4 - max 6 barg
60 minutes period
B) Medium Air
Pt = max 3 barg
10 minutes period

Legend

	Main display controller Viessmann		flow meter
	pressure meter		pump
	closing manual valve		temperature meter
	manual valve		

DN12 - Pipeline PEX-Al-PEX (16x2.0)
DN25 - Pipeline PEX-Al-PEX (32x3.0)
Zx - Sequence of Zone
RDx - Sequence of Rib Dryer

Under-floor water heating

NO.	DATE	REVISION	BY
Dwg Title			
Under-floor heating			
ENGINEER	L. Molitoris		CHECKED BY
JOB NO			DRAWN BY
SCALE	No Scale		DATE
DWG NO			5.8.2014
SHEET NO			
01 OF 01			