

Cast-iron, diesel oil-fired thermal unit

Lyra C



LYRA CTF - CTFD

Cast-iron diesel oil-fired thermal unit, for CH and instantaneous DHW production; open chamber version (TF) or sealed chamber with split air-intake/flue gas ducts (TFD), 24 and 33 kW heat output, featuring:

- Three gas passes, cast-iron heat exchanger
- Diesel oil-fired, single-stage, blown burner with pre-heater
- Diesel-oil filter
- DHW instantaneous production with micro-water storage
- DHW pump
- CH pump
- 8 l expansion vessel
- Control panel, pre-set for connection to room thermostat
- Zinc electro-plated, powder-paint finished steel casing
- Efficiency rating according to 92/42/EEC: ★★
- Among the accessories a remote control is available for remote boiler management.

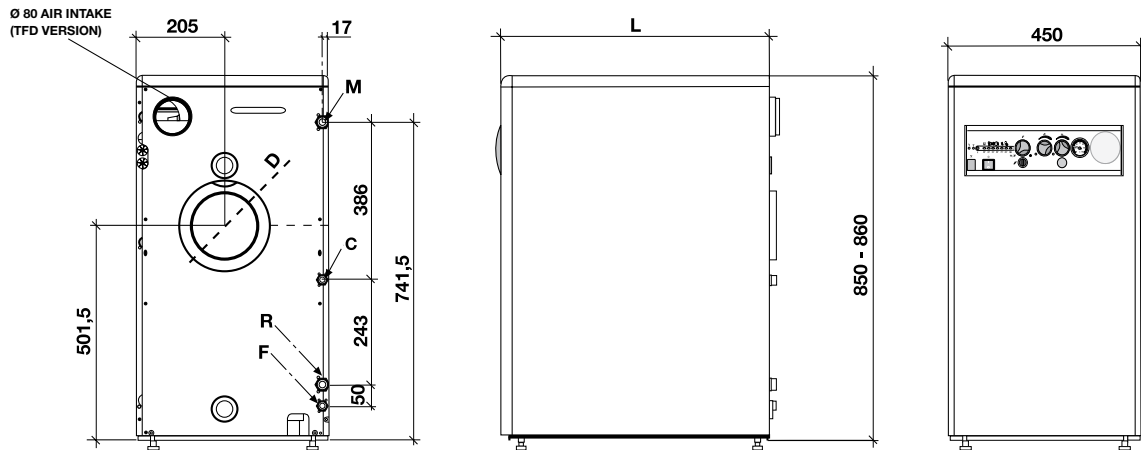
When an installation with different zones is to be managed through a remote control, a dedicated optional kit can be supplied



Cast-iron heat exchanger

Model	Code	Heat output kW	Gross weight
LYRA CTF 23	CLAXx0CB23	24	Kg. 186,2
LYRA CTF 33	CLAXx0CB33	33	Kg. 200,2
LYRA CTFD 23	CLAXx0CD23	24	Kg. 187,0
LYRA CTFD 33	CLAXx0CD33	33	Kg. 201,0

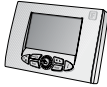

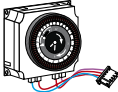
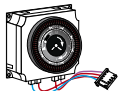
Dimensions



- M** CH flow (¾")
- C** DHW outlet (½")
- F** Cold water inlet (½")
- R** CH return (¾")

Model	L	M	R	C	F	D FLUE GAS DUCT (mm)	COMBUSTION-AIR INTAKE (mm)
CTF 23	625	G ¾	G ¾	G ½	G ½	150	--
CTF 33	755	G ¾	G ¾	G ½	G ½	150	--
CTFD 23	625	G ¾	G ¾	G ½	G ½	120	80
CTFD 33	755	G ¾	G ¾	G ½	G ½	120	80

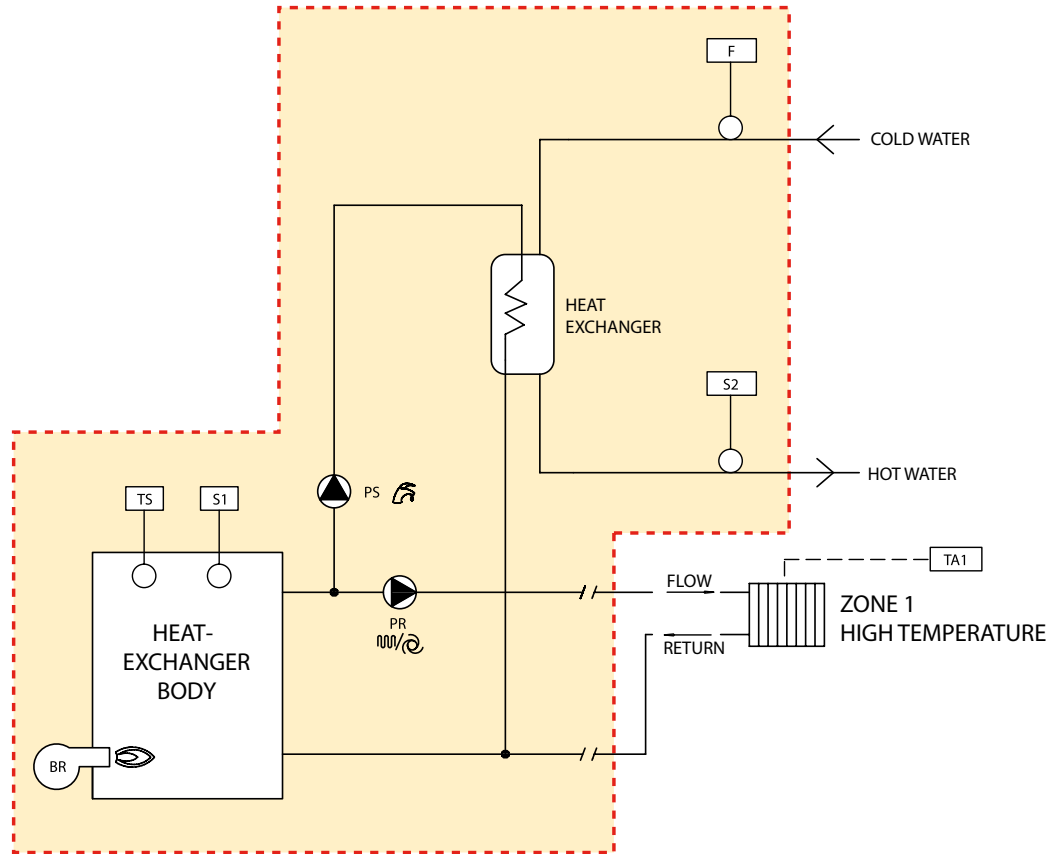
Accessories

Item	Description	Code
	Remote control	OCREMOTO05
	Electric kit for management of three different CH zones through a remote control. Complete with outdoor probe.	OCIRCSTA11
	Day timer kit	OKITBEST04
	Week timer kit	OKITBEST05

Lyra C hydraulic layout

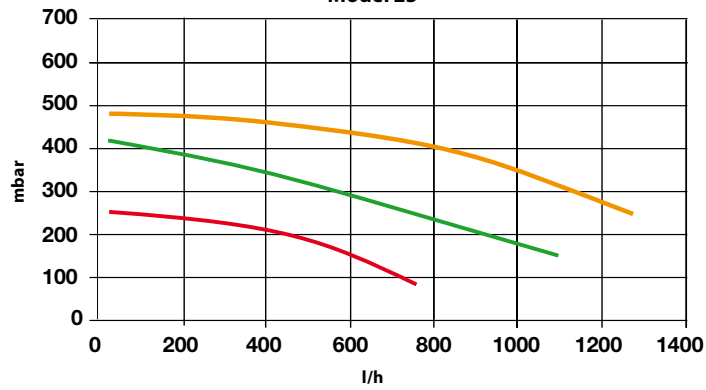
Model C

- S1 CH probe
- PR CH pump
- F priority flow meter
- BR burner
- S2 DHW probe
- PS DHW pump
- TS limit thermostat
- TA1 room thermostat (optional)

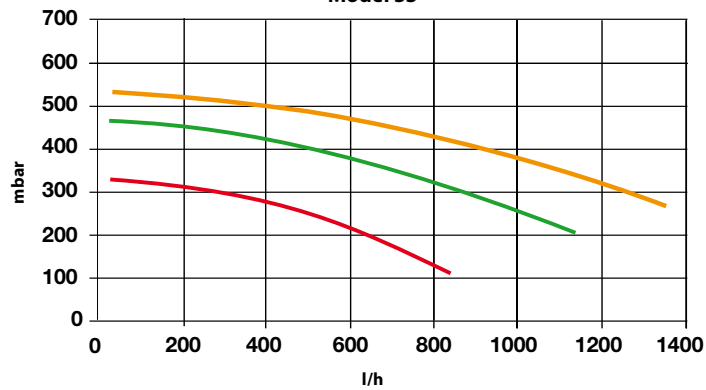


Head available for boiler

Model 23



Model 33



- V3
- V2
- V1

TECHNICAL SPECIFICATIONS		CTF 23 - CTFD 23	CTF 33 - CTFD 33
CE efficiency rating		★★	★★
Heat input	kW	26.6	36.3
Nominal heat output	kW	24.0	33
Efficiency at nominal load	%	90	91
Efficiency at reduced load	%	89.7	90.7
Flue gas loss	%	8.75	8.2
Casing heat loss	%	1.25	1.05
Number of heat exchanger elements		3	4
Value of CO ₂	%	12.5 ÷ 13.0	12.5 ÷ 13.0
Flue gas temperature	°C	210	190
Number of Bacharach		<1	<1
Flue gas flow rate	Kg/h	40.0	53.2
Combustion-air flow rate	m ³ /kW	2	2
Water content	l	20	24
CH system minimum flow rate	l/h	680	950
Water side load loss (ΔT=10K)	Pa	4800	5600
Maintenance loss (ΔT=50K)	%	0.5	0.5
CH temperature adjustment range	°C	50 ÷ 82	50 ÷ 82
CH maximum working pressure	bar	3	3
CH expansion vessel capacity	l	12	12
DHW temperature adjustment range	°C	35 ÷ 57	35 ÷ 57
DHW maximum working pressure	bar	6	6
DHW production (ΔT=30K)	l/min	11.5	15.8
Power supply voltage/frequency	V/Hz	230/50	230/50
Power supply fuse	A	4	4
Height	mm	850	850
Width	mm	450	450
Depth	mm	625	755
Net weight	Kg	776	190

BURNERS TECHNICAL SPECIFICATIONS		CTF 23 - CTFD 23	CTF 33 - CTFD 33
Fuel		Diesel-oil 1.4°E. hi=10210 Kcal/kg 20°C	
Nozzle brand		Delavan W. Steinen Q. Danfoss S	
Nozzle type	Usgal/h	0.65	0.85
Nozzle angle		60°W	60°W
Diesel-oil calibration pressure	bar	11.0	11.4
Diesel-oil consumption	Kg/h	2.24 ± 4%	2.90 ± 4%
Pump depression	bar	> -0.4	> -0.4
Pre-heater	W	25	25
Combustion head calibration	Index	fixed	fixed