

INDIRECT DHW & SPACE HEATING

Introduction

The YGHP DISTRICT range of indirect heat interface units can deliver both instantaneous domestic hot water and heating demand in centralised plant installations.

With a simple, robust, mechanical design, uncomplicated installation and ease of servicing and maintenance, the YGHP DISTRICT range of indirect HIUs offer a range of benefits for both the installer, architect and specifier.

Design

An indirect HIU is specifically designed to hydraulically separate the primary circuit from the secondary heating circuit.

Utilising two SWEP plate heat exchangers, the YGHP DISTRICT indirect HIU delivers both space heating and instantaneous domestic hot water demand.

Space heating flow temperatures are set using a mechanical thermostat to suit the particulars of any given installation. Two thermostats, with different control ranges, are available, ensuring the unit is suitable for installation with both radiators and UFH.

Flow rates on the secondary heating side are controlled by a high efficiency WILO Para 15/7 circulating pump.

Heating demand is dictated by an AFRISO electronically controlled actuator. In combination with a room thermostat, the unit ensures comfort and stability of temperature for tenants.

Instantaneous domestic hot water is delivered in an impressive three seconds from opening a DHW outlet. The set temperature of DHW flow is controlled by a mechanical thermostat which sits within the plate heat exchanger.

This not only gives excellent response times due to its position, but also boasts an anti-tamper function to help minimise the risk of scalding to end users.

There are also a variety of optional accessories offered including a flushing by-pass valve and a pre-payment valve for use with a number of different billing systems.

First fix kits are also available, giving the benefit of being able to flush and commission the primary circuit before the unit arrives on site.

In addition to this, every YGHP DISTRICT HIU has an EPP cover, maximising heat retention and helping maintain system performance.



Features & Benefits

- Robust, durable, mechanical design
- Suitable for radiators and UFH
- DHW demands up to 120kW
- DHW response time of three seconds
- Space heating demands up to 15kW
- Bespoke design service available
- Ideal for use in pre-fabricated utility cupboards
- Insulating EPP cover maintains performance
- WRAS approved & CE marked component parts
- High efficiency WILO para circulating pump
- SWEP plate heat exchangers
- CIMM heating & water hammer expansion vessels
- AFRISO safety relief valve and actuator
- AISI 316L stainless steel pipework
- First fix kits available for ease of install
- Pre-payment valve option for ease of billing
- Simple to install
- Front facing components for ease of maintenance

Technical Specification:

Heating

Radiators	40-90°C
UFH	20-50°C
Secondary circuit max. pressure	10 Bar
Secondary circuit max. operating pressure	2.5 Bar
Max. pressure loss in primary	40 kPa
Max. pressure loss in secondary	40 kPa
Pump	Wilo Para 15/7
Safety relief valve setting	3 Bar
Expansion vessel	8 Litres
Heating control circuit (room stat)	240 V

Domestic Hot Water - DHW

Set point	20-70°C
Max. pressure	16 Bar
Max. operating pressure	4 Bar
DHW flow rate*	12/ 18 / 23 l/ min
DHW PHE capacity	33 - 120 kW

Primary Side

Max. working pressure	16 Bar
Max. working temperature	90°C
Fluid medium	Water
DPCV factory setting	40 kPa
Maximum differential pressure	150 kPa

External Connections

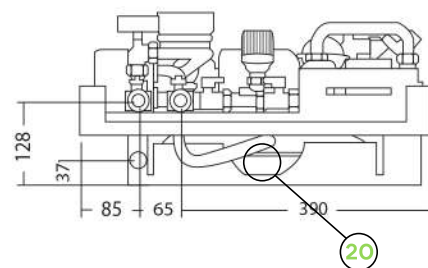
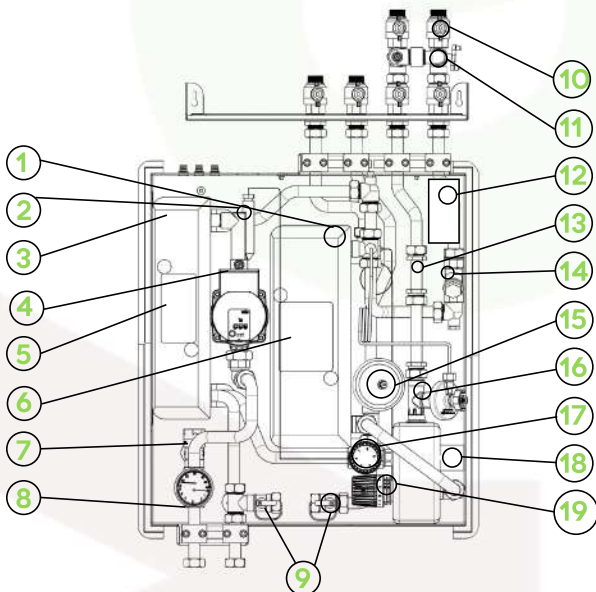
Primary flow	G 3/4" BSP
Primary return	G 3/4" BSP
Secondary flow	G 3/4" BSP
Secondary return	G 3/4" BSP
Cold water inlet	G 3/4" BSP
DHW outlet	G 3/4" BSP

Electrical Connections

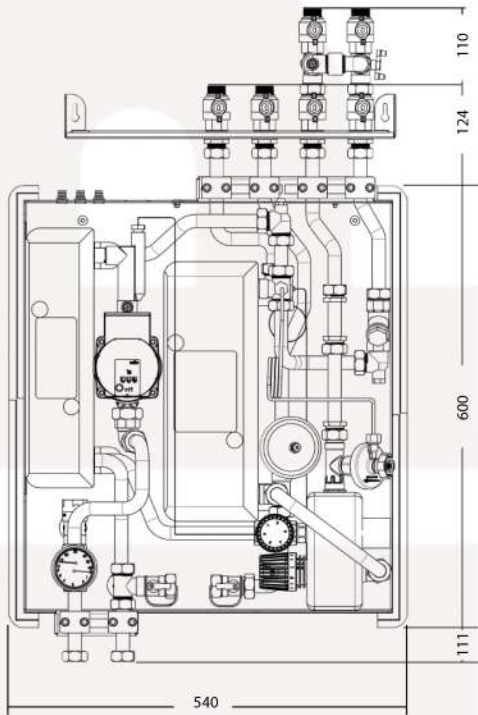
Main voltage	230V AC \pm 10%
Power frequency	50-60 Hz
Operating voltage	5 V AC \pm 10%
Input	0.15 - 3W
Protection	IP44

Component Parts

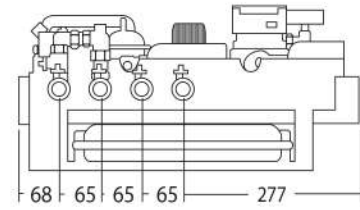
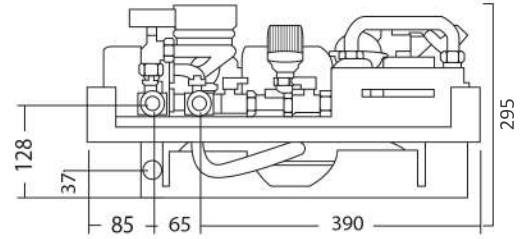
1. Plate Heat Exchanger Cover (EPP)
2. Manual Air Vent
3. Plate Heat Exchanger Cover (EPP)
4. WILO Para 15/7 Circulating Pump
5. SWEP Heating Plate Heat Exchanger
6. SWEP DHW Plate Heat Exchanger
7. Safety Relief Valve
8. Temperature & Pressure Gauge
9. Cold Water Circuit and Secondary Heating Drain Valves
10. Primary Circuit Isolating Ball Valves
11. Flushing By Pass Valve Assembly
12. Electrical Junction Box (Model Specific)
13. Stool Piece for Heat Meter
14. Y-Pattern Strainer
15. CIMM Shock Arrestor Vessel
16. BALLOREX Differential Pressure Control Valve
17. Heating Thermostatic Control Head
18. Thermal Actuator (NC)
19. DHW Thermostatic Control Head
20. CIMM Heating Expansion Vessel



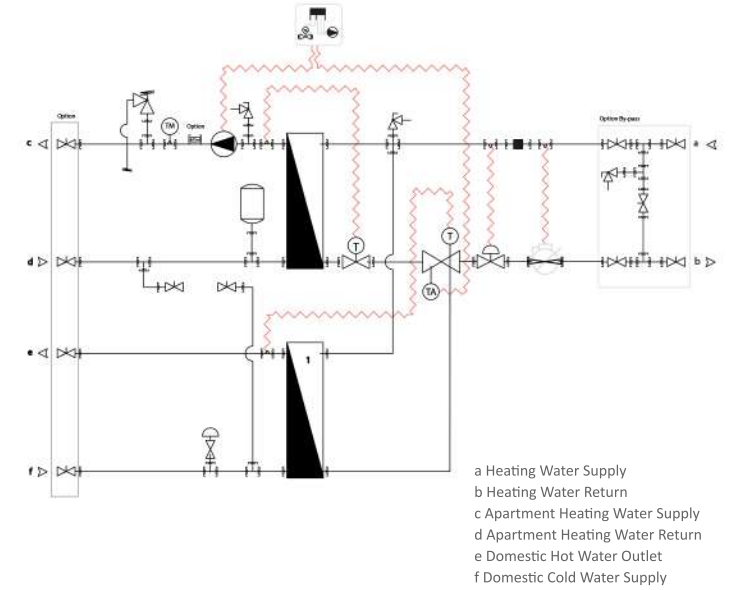
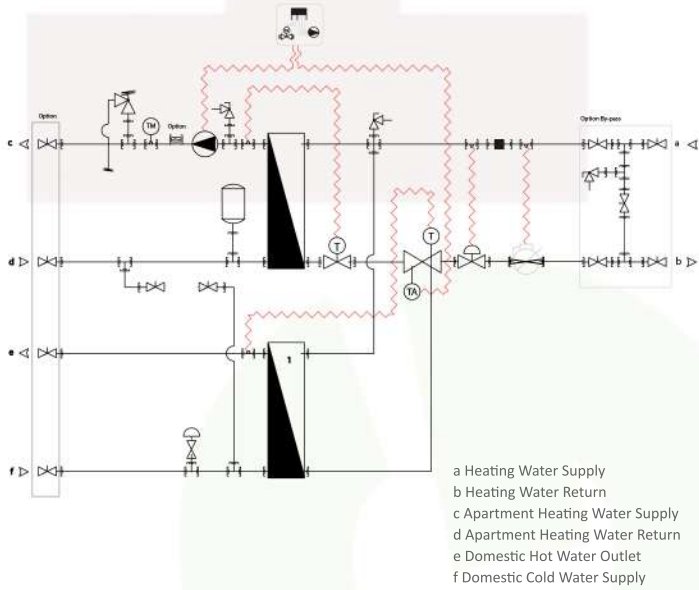
DIMENSIONS



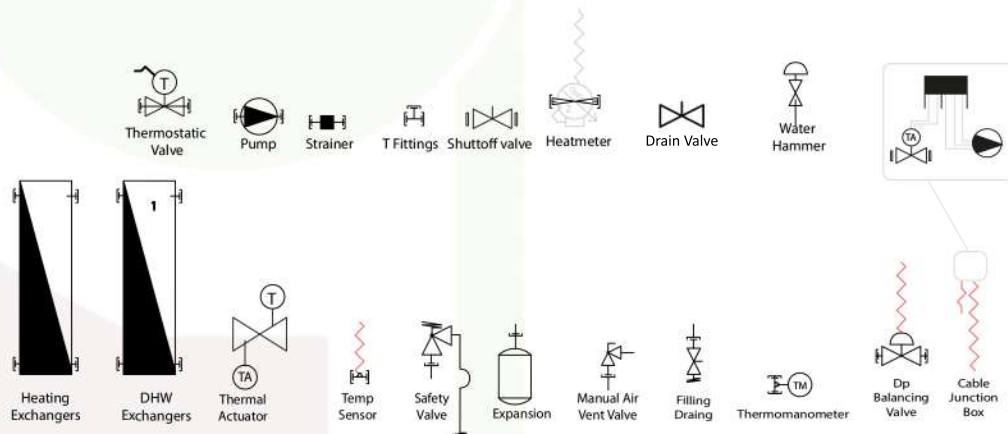
RADIATOR SYSTEM SCHEMATIC



UFH SYSTEM SCHEMATIC

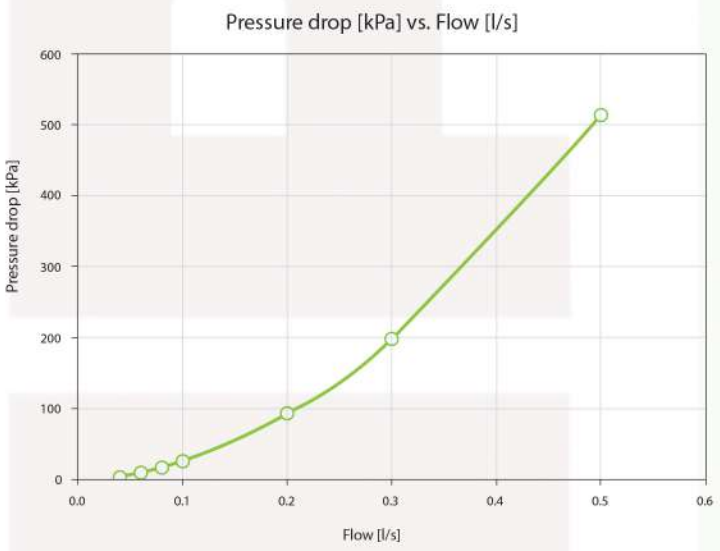


COMPONENT KEY



HYDRAULIC CHARACTERISTICS

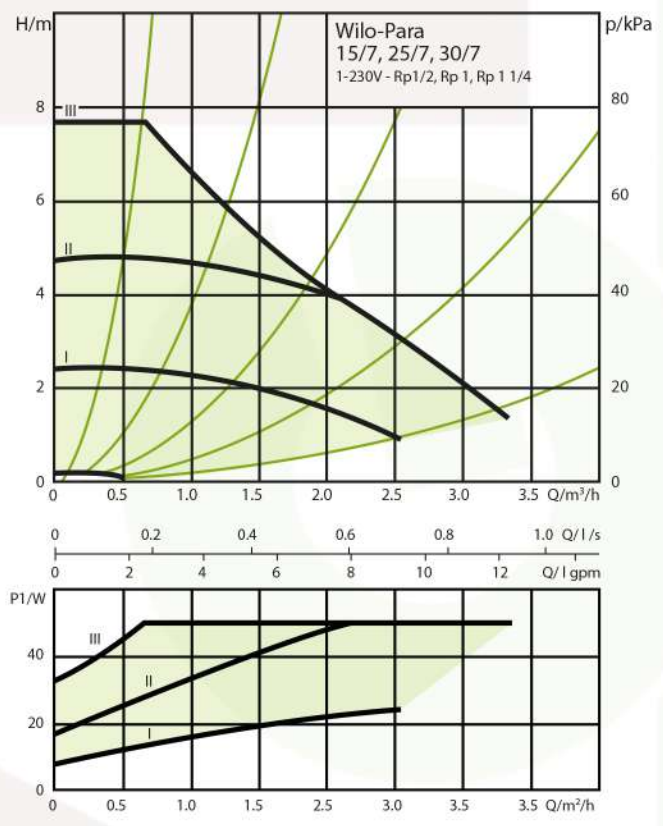
Heating - Primary Circuit Side



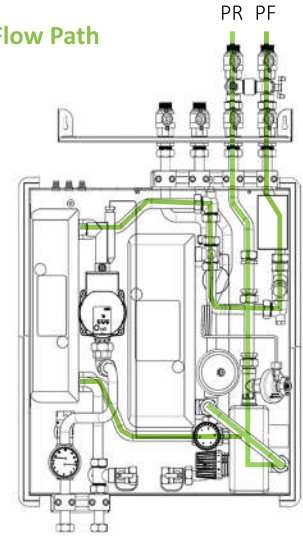
Secondary Heating

WILO Para 15/7 Pump Settings

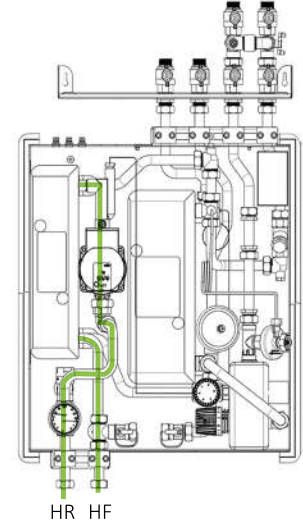
Constant speed I, II, III



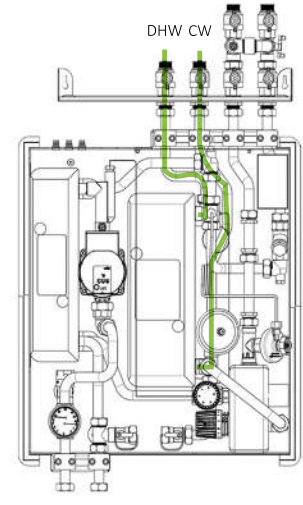
Primary Circuit Flow Path



Secondary Heating Circuit Flow Path

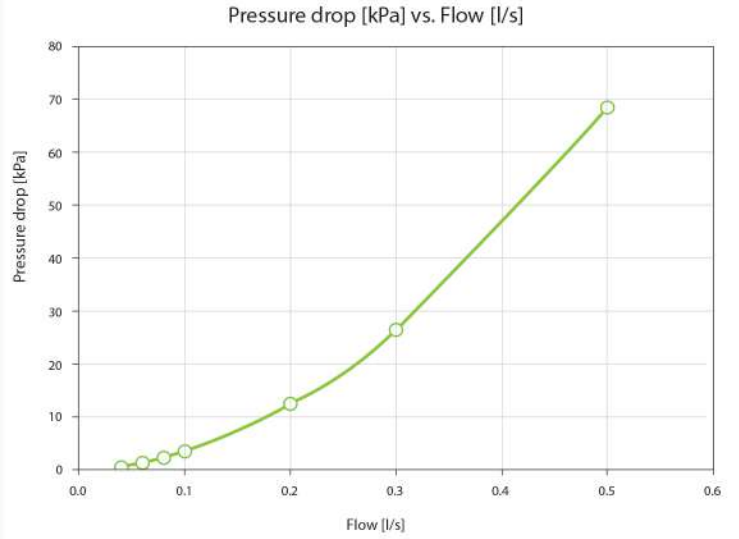
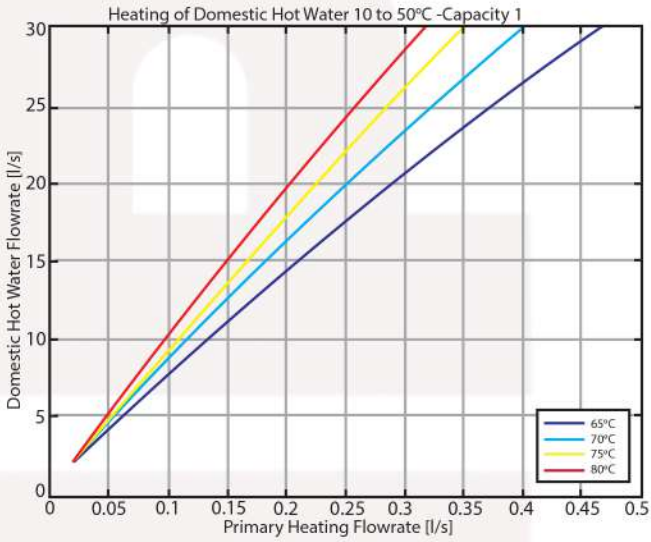


Domestic Hot Water Flow Path

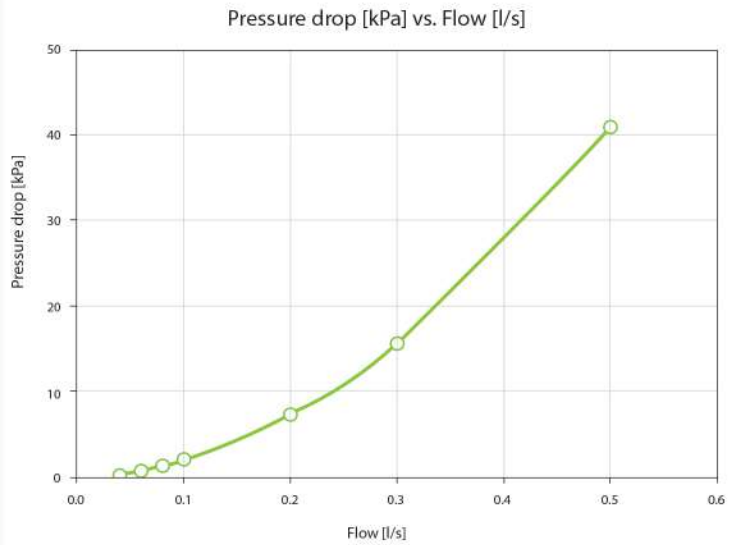
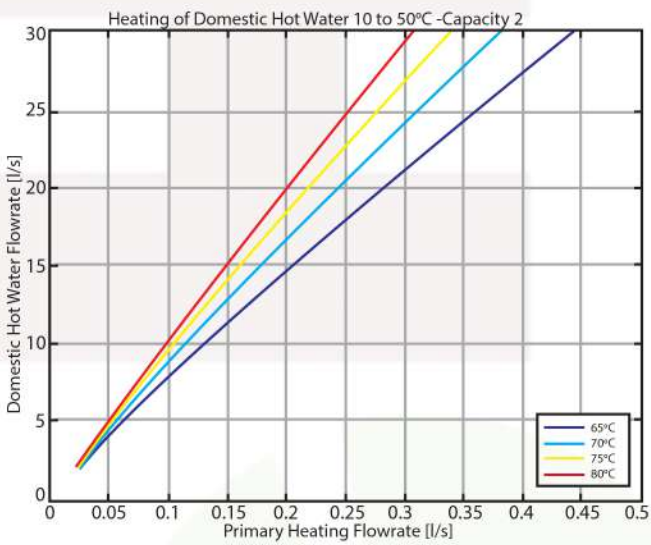


DOMESTIC HOT WATER OUTPUT

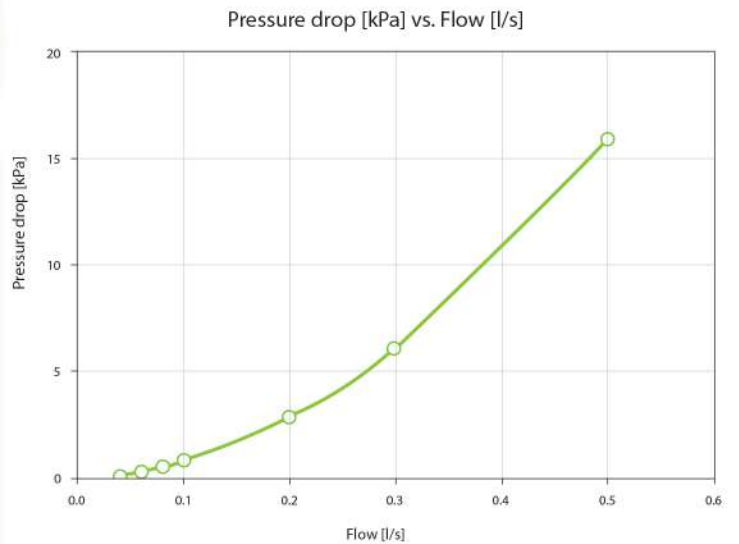
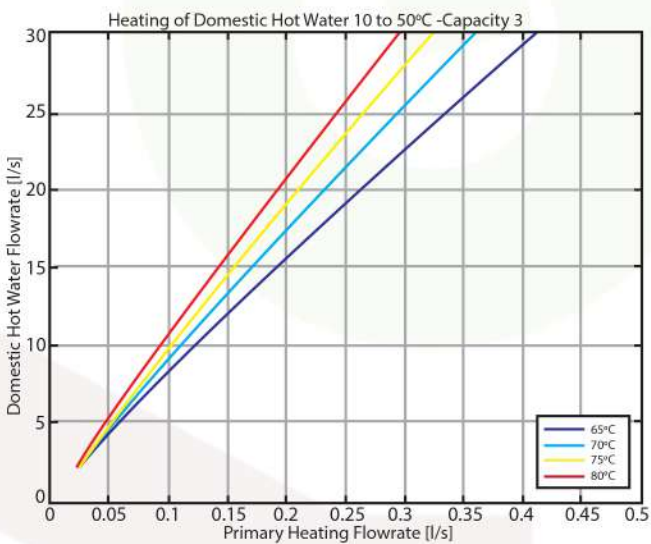
Capacity One - DHW output up to 40kW



Capacity Two - DHW output up to 60kW



Capacity Three - DHW output up to 120kW





YATES GROUP HEATING PRODUCTS

UNIT 9, HEMLOCK PARK, HYSSOP CLOSE, CANNOCK, WS11 7FB

E&OE (09/20)

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