Parts list for the Thermal Test Chamber project by Bob F Burns, G3OOU, *RadCom* March 2019

Ref	Description
BR1	50V 1A bridge rectifier
C	100n 50v ceramic or polyester capacitor
C2	100n 50v ceramic or polyester capacitor
C3	330n 50v ceramic or polyester capacitor
C4	1000u 35v electrolytic capacitor
C5	10n 1KV disk ceramic capacitor
C6	100n 50v polyester capacitor
C7	100n 50v ceramic or polyester capacitor
C8	100n 50v polyester capacitor
D1	1N4001
F1	1A 230V AC 20mm fast blow fuse and holder
IC1	7812 12v 1A regulator – standard or low drop out (LDO) type
IC2	CA3140 CMOS op-amp
M1	12v 80mA miniature computer cooling fan
M2	230V AC synchronous motor
N1 – N3	Red 230V AC neon lamp
N4	230V AC neon lamp (different in style and colour to N1-N3 to make it stand out)
R1	10K 1/3W 5% carbon film resistor
R2	15K 1/3W 5% carbon film resistor
R3	47K 1/3W 5% carbon film resistor
R4	4K7 1/3W 5% carbon film resistor
R5	1K 1/3W 5% carbon film resistor
R6	680R 1/3W 5% carbon film resistor
R7	47K 1/3W 5% carbon film resistor
R8	4M7 1/3W 5% carbon film resistor
R9	4K7 1/3W 5% carbon film resistor
R10	10K 1/3W 5% carbon film resistor
R11-14	1K 25W aluminium encapsulated wirewound resistor – Arcol HS25
R15	220K 1W 5% carbon film resistor rated for 350V or more working voltage
RL1	12v DC SPCO relay with 230V rated contacts at 1A
S1	DPST (or DPDT) miniature 230V mains switch
S2, S3	SPST miniature 230V mains switch
SK1	Suitable mains-rated plug & socket pair, eg the IEC ‘kettle lead’ type. I used a Bulgin 3 pin miniature chassis mounting male mains connector because I had that and a matching female connector available.
T1	Mains transformer: primary 230V, secondary 15 – 18V 250mA maximum
TC1	70°C normally closed thermal cutout switch – Asahi: US622AXTJQE07003
TH1	5KΩ 10% negative temperature coefficient thermistor – TKS: TTC05502KSY
TR1	BFY51, 2N3053 or equivalent
VR1	5K linear carbon or Cermet panel mounting potentiometer

Components not immediately to hand in my junkbox were ordered from Rapid Online, www.rapidonline.com or Farnell, https://uk.farnell.com