

# Ferrotec Nord Corp.

## PRODUCT GENERAL SPECIFICATION

Last update: January 01, 2016

### ONE-STAGE STANDARD MODULES

MODULE TYPE	BASIC CHARACTERISTICS, $T_h=25\text{ }^\circ\text{C}$ , VACUUM ENVIRONMENT				DIMENSIONS, mm		
	$I_{max}$ , A	$U_{max}$ , V	$Q_{cmax}$ , W	$\Delta T_{max}$ , $^\circ\text{C}$	Cold side	Hot side	Height
TM-17-1.0-2.5	2,5	2.0	3.3	74	12 × 12	12 × 12	4.2
TM-31-1.0-2.5	2,5	3.6	6.0	74	15 × 15	15 × 15	4.2
TM-63-1.0-2.5	2,5	7.2	12.4	74	15 × 30	15 × 30	4.2
TM-71-1.0-2.5	2,5	8.2	11.9	74	22.4 × 22.4	22.4 × 22.4	4.2
TM-127-1.0-2.5	2,5	14.6	25	74	30 × 30	30 × 30	4.2
TM-17-1.0-3.0	3,0	2.0	4.3	74	12 × 12	12 × 12	3.8
TM-23-1.0-3.0 *	3,0	2.6	5.8	74	15 × 15	15 × 15	3.6
TM-31-1.0-3.0	3,0	3.6	7.8	74	15 × 15	15 × 15	3.8
TM-63-1.0-3.0	3,0	7.2	15.8	74	15 × 30	15 × 30	3.8
TM-71-1.0-3.0	3,0	8.2	17.8	74	22.4 × 22.4	22.4 × 22.4	3.8
TM-127-1.0-3.0	3,0	14.6	32	74	30 × 30	30 × 30	3.8
TM-127-0.9-3.0	3,0	14.6	32	74	30 × 30	30 × 30	3.4
TM-241-1.0-3.0	3,0	27.9	60.0	74	40 × 40	40 × 40	3.8
TM-450-0.8-3.0	3,0	52.2	103	74	54.4 × 54.4	54.4 × 57.0	3.4
TM-17-1.4-3.7	3,7	2.0	4.8	74	15 × 15	15 × 15	4.7
TM-31-1.4-3.7	3,7	3.6	8.6	74	20 × 20	20 × 20	4.7
TM-35-1.4-3.7	3,7	4.0	9.7	74	15 × 30	15 × 30	4.7
TM-63-1.4-3.7	3,7	7.2	17.6	74	20 × 40	20 × 40	4.7
TM-71-1.4-3.7	3,7	8.2	20.0	74	30 × 30	30 × 30 30 × 34	4.7
TM-127-1.4-3.7	3,7	14.6	35.5	74	40 × 40	40 × 40 40 × 44	4.7
TM-17-1.0-3.9	3,9	2.0	5.2	74	12 × 12	12 × 12	3.6
TM-31-1.0-3.9	3,9	3.6	9.2	74	15 × 15	15 × 15	3.6
TM-63-1.0-3.9	3,9	7.2	18.4	74	15 × 30	15 × 30	3.6
TM-71-1.0-3.9	3,9	8.2	20.7	74	22.4 × 22.4	22.4 × 22.4	3.6
TM-127-1.0-3.9	3,9	14.6	36.6	74	30 × 30	30 × 30	3.6
TM-241-1.0-3.9	3,9	27.9	70.0	74	40 × 40	40 × 40	3.6
TM-161-1.2-4.5	4,2	18.6	48.1	74	40 × 40	40 × 40	3.8
TM-51-0.9-5.5	5,5	5.8	19.5	73.5	34.6 × 6	36 × 6	3.2
TM-17-1.4-6.0	6,0	2.0	7.4	74	15 × 15	15 × 15	3.8
TM-31-1.4-6.0	6,0	3.6	13.6	74	20 × 20	20 × 20	3.8

MODULE TYPE	BASIC CHARACTERISTICS, Th=25 °C, VACUUM ENVIRONMENT				DIMENSIONS, mm		
	I <sub>max</sub> , A	U <sub>max</sub> , V	Q <sub>cmax</sub> , W	ΔT <sub>max</sub> , °C	Cold side	Hot side	Height
TM-35-1.4-6.0	6,0	4.0	15.3	74	15 × 30	15 × 30	3.8
TM-63-1.4-6.0	6,0	7.2	27.5	74	20 × 40	20 × 40	3.8
TM-71-1.4-6.0	6,0	8.2	31.5	74	30 × 30	30 × 30 30 × 34	3.8
TM-127-1.4-6.0	6,0	14.6	55	74	40 × 40	40 × 40 40 × 44	3.8
TM-161-1.4-6.0	6,0	18.5	70.5	74	40 x40	40 x 40	3.8
TM-241-1.4-6.0	6,0	27.9	107	73.5	55 x 55	55 x 55	4.3
TM-254-1.4-6.0	6,0	29.3	113	74	40 × 80	44 × 80	3.8
TM-257-1.4-6.0**	6,0	29.5	110	74	Ø 62	Ø 62	4.16
TM-260-1.0-6.0	6,0	30.3	114	73	51 x 55	55 x 55	3.7
TM-71-1.2-7.5	7,5	8.2	36	73.5	22.4 × 22.4	22.4 × 22.4	3.2
TM-127-1.2-7.5	7,5	14.6	64	73.5	30 × 30	30 × 30	3.2
					40 × 40	40 × 40	3.2
TM-144-1.2-8.0	8,0	16.6	81	74	16 × 72	17 × 77	2.7
TM-17-1.4-8.5	8,5	2.0	10.5	73.5	15 × 15	15 × 15	3.4
TM-31-1.4-8.5	8,5	3.6	18.5	73.5	20 × 20	20 × 20	3.4
TM-35-1.4-8.5	8,5	4.0	21.0	73.5	15 × 30	15 × 30	3.4
TM-63-1.4-8.5	8,5	7.2	37.0	73.5	20 × 40	20 × 40	3.4
TM-70-1.4-8.5 *	8,5	8.0	43.5	73.5	35 × 35	35 × 37	3.4
TM-71-1.4-8.5	8,5	8.2	44	73.5	30 × 30	30 × 30	3.4
						30 × 34	
TM-127-1.4-8.5	8,5	14.6	75	73.5	40 × 40	40 × 40	3.4
						40 × 44	
TM-241-1.4-8.5	8,5	27.7	140	73.5	54.4 × 54.4	54.4 × 57	3.4
TM-32-2.0-9.0	9,0	3.6	21	73.5	25.4×25.4	25.4×28.4	4.6
TM-71-1.4-9.0	9,0	8.2	50	73.5	30 × 30	30 × 30	3.4
TM-120-1.6-11.0 *	11	14.0	92	73.5	35 × 35	35 × 37.5	3.4
TM-241-1.6-11.0	11,0	27.9	187	73.5	50 × 50	50 × 54	3.8
TM-71-2.0-12.0	12,0	8.2	63	73.5	40 × 40	40 × 40	3.8
TM-127-2.0-12.0	12,0	14.6	113	72	50 × 50	50 × 54	3.8
TM-198-1.4-12.0	12,0	23.4	170	73.5	32 x 50	32 x 50	3.2
TM-199-1.4-12.0	12,0	23.4	166	73.5	40 × 40	40 × 44	3.2
TM-32-2.0-15.0	15,0	3.6	35	73	25.4×25.4	25.4×28.4	3.6
TM-71-1.6-15.0	15,0	8.2	70	73	29.2 × 29.2	29.8 × 33.8	2.35
TM-71-2.0-15.0	15,0	8.2	74	73	40 × 40	40 × 40	3.6
TM-72-1.6-15.0	15,0	8.2	72	73	30 x 30	30 x 34	3.1
TM-127-1.6-15.0	15,0	14.6	120	73	40 × 40	40 × 40	3.2
						40 × 44	
TM-127-2.0-15.0	15,0	14.6	140	73	50 × 50	50 × 54	3.6
TM-161-1.6-15.0	15,0	18.5	165	73	40 × 40	40 × 40	3.3
TM-241-1.6-15.0	15,0	27.9	240	73	50 × 50	50 × 54	3.6
TM-70-2.5-15.5	15,5	8.1	76	73	36,4 × 50.2	36.4 × 54.4	4,7
TM-70-2.5-20.0	20,0	8.1	86	73	36.4 x 50.2	36.4 x 54.4	4.4

MODULE TYPE	BASIC CHARACTERISTICS, Th=25 °C, VACUUM ENVIRONMENT				DIMENSIONS, mm		
	I <sub>max</sub> , A	U <sub>max</sub> , V	Q <sub>cmax</sub> , W	ΔT <sub>max</sub> , °C	Cold side	Hot side	Height
TM-75-2.5-20.0	20,0	8.7	118	73	37.4 × 54.8	37.4 × 59	3.2
TM-241-1.6-20.0	20,0	27.9	310	72.5	50 × 50	50 × 54	3.45
TM-70-2.5-24.0	24,0	8.1	113	72.5	36,4 × 50.2	36.4 × 54.4	3.2
TM-241-1.6-28.0	28,0	27.9	450	72	50 × 50	50 × 54	3.25
TM-18-5.0-60.0	60,0	2.1	78	72	40 × 40	40 × 40	4.5
TM-18-5.0-75.0	75,0	2.1	95	72	40 × 40	40 × 40	4.2
TM-18-5.0-90.0	90,0	2.1	112	72	40 × 40	40 × 40	4.0

\* Module with a centre hole

\*\* Round shape module

### DESIGNATIONS:

I<sub>max</sub> – Input current resulting in greatest ΔT<sub>max</sub>, (A)

U<sub>max</sub> – Input Voltage at ΔT<sub>max</sub>, (V)

Q<sub>cmax</sub> – Maximum heat pumping capacity at I<sub>max</sub>, ΔT = 0 K, (W)

ΔT<sub>max</sub> – Maximum temperature difference a module can achieve at I = I<sub>max</sub> and Q<sub>c</sub> = 0, (K)

### HOW TO DECODE PELTIER MODULE MARKING:

#### One stage modules:

TMC-127-1.4-6.0 MS

