



## TACFR® (Thermal alloy Aluminium Conductor Fiber Reinforced):

CONDUCTOR NAME	CROSS SECTIONAL AREA			DIAMETER		WEIGHT			RATED STRENGTH		DC RESISTANCE @ 20°C	CURRENT CAPACITY		
	AL	CORE	TOTAL	CONDUCTOR	CORE	ALUMINIUM	CORE	TOTAL	CORE	CONDUCTOR		@85°C	@150°C	@180°C
TACFR®	(MM <sup>2</sup> )	(MM <sup>2</sup> )	(MM <sup>2</sup> )	(MM)	(MM)	(KG/KM)	(KG/KM)	(KG/KM)	(KN)	(KN)	(Ω/KM)	(AMP)	(AMP)	(AMP)
ACFR 99/17-T3-RR	99.74	17.20	116.94	14.15	5.3	275	27	302	36.80	38.50	0.2943	347	533	591
ACFR 121/28-T3-RR	121.41	28.33	149.74	15.89	6.80	336	44	380	60.30	71.80	0.2420	395	608	675
ACFR 220/28-T1-TT	219.6	28.2	247.8	18.32	6.80	605.5	44	649.5	60.30	70.00	0.1335	551	854	-
ACFR 244/37-T3-TT	244.2	37.2	281.4	19.60	7.80	673	60	733	79.50	104.70	0.1200	592	919	1022

**Note:** Current Carrying Capacity is calculated as per the following Assumptions:

Wind Velocity: 0.61 m/sec; Solar Absorption Co-efficient: 0.5; Emissivity: 0.5; Ambient Temperature: 40°C; Solar Radiation: 1033 Watt/Sq.m

### DESCRIPTION OF ACFR NAME:

#### Aluminum Shape:

- T : 1 layer Trapezoidal
- TT : 2 layer Trapezoidal
- TTT : 3 layer Trapezoidal
- R : 1 layer Round
- RR : 2 layer Round
- RRR : 3 layer Round

#### Aluminium Material:

- FA : Fully annealed (1350-O)
- T1 : AT1 ( AT1/TAL )
- T2 : AT3 ( AT3/ZTAL, UTAL )

**CFCC Core**  
CARBON FIBER REINFORCED CABLE

**Trapezoidal Shape**

**Annealed Aluminum Wire  
(or TAL/ Hard-drawn Wire)**

