



Form No. 2038

उत्पाद मानक

परिणामित्र

शाप/अभि. निर्देश

PRODUCT STANDARD

TRANSFORMER

SHOP/ENGG INSTRUCTIONS

TR 10141C

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TITLE: - DIMENSION AND TOLERANCES FOR CORE**General:** This specification governs the dimensions and tolerances on core assembly.**Compliance with standards:** There is no National /International standards covering the above requirements. However following dimensions and tolerances are derived to control the process of core manufacturing. In case of any deviation, it should be referred to Engineering Department for review and clearance.**1.0 CORE DIMENSIONS :-**1.1 **DIAMETER :-** This is to be multiple of 2mm.1.2 **LEG LENGTH :-** This is to be multiple of 2mm.1.3 **LEG CENTER :-** This is to be multiple of 2mm.1.4 **No. OF PACKETS :-** This is to be as given below –

CORE DIA IN mm.	MAIN LEG NO.OF PACKETS	MAIN YOKE & AUX.LEG / YOKE NO. OF PACKETS**
Up to 500	10	4
502 -760	12	4 -5
More than 760	15	5
	Or more as specified	

** The width and area of main and auxiliary yoke packet after merging should always be more than width and area of the packets before merging .
Refer sheet TR 10137C (pages 1 to 3 for figures.)

1.5 LAMINATION WIDTH :- This is to be multiple of 10mm, however for main yokes and outer legs of 5 limbed cores, the center packed lamination can be multiple of 5 mm.

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2.0 TOLERANCES ON CORES :-

2.1

Core Dia in mm	ToL. On Dia in mm	ToL. On total built up thickness in mm.
Up to 400	+0 -3	+3 -0
402 -760	+0 -4	+4 -0
762 -1100	+0 -5	+5 -0
Above 1100	+0 -7	+6 -0

2.2 TOLERANCE BETWEEN CENTER LINE OF TOP & BOTTOM YOKE + 2, - 0 mm.

2.3 TOLERANCE BETWEEN CENTER LINE OF 2 CONSECUTIVE MAIN LEGS. + 1, - 0 mm.

2.4 TOLERANCES ON CORE LEANING

- 2 mm PER METER ON MAIN LEG INCLUDING YOKES.
- 3 mm PER METER ON AUX LEG INCLUDING YOKES.

ABOVE TO BE MEASURED USING PLUMB. LOCAL WAVINESS IN YOKES AT LEG LOCATION SHALL BE CHECKED AND SUITABLY ADDED/SUBTRACTED IN ABOVE VALUES DEPENDING UPON THE CORE BEHAVIOUR.

2.5 TOLERANCE ON TOP INDIVIDUAL CORE PACKET ± 1.00 MM.

2.6 TOLERANCE ON TOP/ BOTTOM YOKE WAVINESS:

UPTO 750 Tk : ± 5 mm.
UPTO 1000 Tk : ± 10 mm.
ABOVE 1000 Tk : ± 15 mm,

2.7 TOLERANCE ON MAIN/ AUX LEG LAMINATION WAVINESS:

UPTO 750 Tk : ± 5 mm.
From 750 to 1000 Tk : ± 7 mm.
ABOVE 1000 Tk : ± 9 mm,

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3.0 TOLERANCES ON LAMINATIONS**3.1 LENGTH** - + 0.0 mm.

- 1.5 mm.

3.2 WIDTH - Up to 250 mm

+ 0

- 0.2 mm

More than 250 mm

+ 0

- 0.25 mm

3.3 HOLES (A) ON HOLE DIA ± 0.1 MM(B) DISTANCE BETWEEN FIRST AND LAST HOLE ± 0.25 MM(C) DISTANCE BETWEEN SUCCESSIVE HOLES ± 0.1 MM.(D) OFF -SET PERPENDICULAR TO CENTRE LINE ± 0.1 MM**3.4 ANGLE OF MITRE** - ANGLE $45^\circ \pm 1$ MIN.

THIS CAN BE MEASURED AS FOLLOWS: USING A FIXED 45° SET - SQUARE, THE DEVIATION OF ANGLE OF THE MITRE OVER A MAX. WIDTH OF 1000 mm SHALL NOT EXCEED 0.5 mm GAP (AS SHOWN IN THE FIG, 1&2 WHEN MEASURED BY A FILLER GAUGE) OR PROPORTIONATE THERE OF FOR OTHER WIDTH.

GAP 0.5 mm

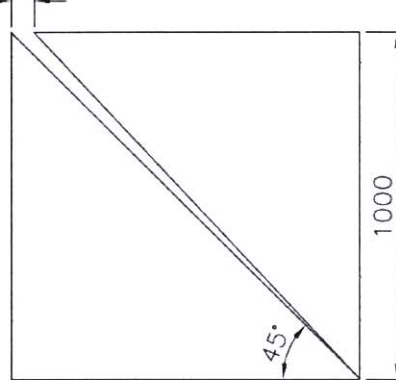


FIG 1

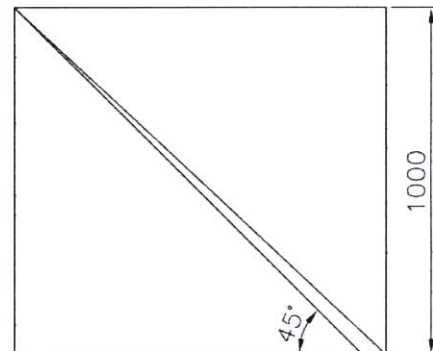


FIG 2

GAP 0.5 mm

3.5 EDGE BOW:- THIS SHOULD NOT EXCEED 0.50mm/METRE OR PROPORTIONATE THERE OF WITH A MAXIMUM OF 1.5 mm

3.6 BURR LEVEL:- THE MAXIMUM PERMISSIBLE BURR LEVEL SHALL BE 25 MICRONS AS MENTIONED IN CLAUSE 11.6 OF IS : 3024, 2006.

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