



DHV TESTREPORT LTF 2009

AIRCROSS U-CROSS M

Type designation Aircross U-Cross M
Type test reference no DHV GS-01-1944-11
Holder of certification [Kontest GmbH - AirCross](#)
Manufacturer [Kontest GmbH - AirCross](#)
Classification C
Winch towing Yes
Number of seats min / max 1 / 1
Accelerator Yes
Trimmers No



BEHAVIOUR AT MIN WEIGHT IN FLIGHT (90KG)

BEHAVIOUR AT MAX WEIGHT IN FLIGHT (105KG)

Test pilots



Beni Stocker



Harald Buntz

Inflation/take-off	A	A
Rising behaviour Smooth, easy and constant rising		Smooth, easy and constant rising
Special take off technique required No		No
Landing	A	A
Special landing technique required No		No
Speeds in straight flight	A	A
Trim speed more than 30 km/h Yes		Yes
Speed range using the controls larger than 10 km/h Yes		Yes
Minimum speed Less than 25 km/h		Less than 25 km/h
Control movement	C	C
Symmetric control pressure Increasing		Increasing
Symmetric control travel 45 cm to 60 cm		50 cm to 65 cm
Pitch stability exiting accelerated flight	A	A
Dive forward angle on exit Dive forward less than 30°		Dive forward less than 30°
Collapse occurs No		No
Pitch stability operating controls during accelerated flight	A	A
Collapse occurs No		No
Roll stability and damping	A	A
Oscillations Reducing		Reducing
Stability in gentle spirals	A	A
Tendency to return to straight flight Spontaneous exit		Spontaneous exit
Behaviour in a steeply banked turn ⚠️	B	B
Sink rate after two turns More than 14 m/s		More than 14 m/s
Symmetric front collapse	B	C
Entry Rocking back less than 45°		Rocking back less than 45°
Recovery Spontaneous in 3 s to 5 s		Spontaneous in 3 s to 5 s
Dive forward angle on exit Dive forward 0° to 30°		Dive forward 0° to 30°
Change of course Entering a turn of less than 90°		Entering a turn of 90° to 180°
Cascade occurs No		No
Symmetric front collapse in accelerated flight	C	C
Entry Rocking back greater than 45°		Rocking back greater than 45°
Recovery Spontaneous in 3 s to 5 s		Spontaneous in 3 s to 5 s
Dive forward angle on exit Dive forward 30° to 60°		Dive forward 0° to 30°
Change of course Entering a turn of less than 90°		Entering a turn of 90° to 180°

	Cascade occurs No	No
<u>Exiting deep stall (parachutal stall)</u>	A	A
Deep stall achieved	Yes	Yes
Recovery	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 0° to 30°
Change of course	Changing course less than 45°	Changing course less than 45°
Cascade occurs	No	No
<u>High angle of attack recovery</u>	A	A
Recovery	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Cascade occurs	No	No
<u>Recovery from a developed full stall</u>	B	B
Dive forward angle on exit	Dive forward 30° to 60°	Dive forward 30° to 60°
Collapse	No collapse	No collapse
Cascade occurs (other than collapses)	No	No
Rocking back	Greater than 45°	Less than 45°
Line tension	Most lines tight	Most lines tight
<u>Asymmetric collapse 45-50%</u>	A	A
Change of course until re-inflation	Less than 90°	Less than 90°
Maximum dive forward or roll angle	Dive or roll angle 15° to 45°	Dive or roll angle 15° to 45°
Re-inflation behaviour	Spontaneous re-inflation	Spontaneous re-inflation
Total change of course	Less than 360°	Less than 360°
Collapse on the opposite side occurs	No	No
Twist occurs	No	No
Cascade occurs	No	No
<u>Asymmetric collapse 70-75%</u>	C	C
Change of course until re-inflation	Less than 90°	90° to 180°
Maximum dive forward or roll angle	Dive or roll angle 45° to 60°	Dive or roll angle 45° to 60°
Re-inflation behaviour	Spontaneous re-inflation	Spontaneous re-inflation
Total change of course	Less than 360°	Less than 360°
Collapse on the opposite side occurs	No	No
Twist occurs	No	No
Cascade occurs	No	No
<u>Asymmetric collapse 45-50% in accelerated flight</u>	A	B
Change of course until re-inflation	Less than 90°	90° to 180°
Maximum dive forward or roll angle	Dive or roll angle 15° to 45°	Dive or roll angle 15° to 45°
Re-inflation behaviour	Spontaneous re-inflation	Spontaneous re-inflation
Total change of course	Less than 360°	Less than 360°
Collapse on the opposite side occurs	No	No
Twist occurs	No	No
Cascade occurs	No	No
<u>Asymmetric collapse 70-75% in accelerated flight</u>	C	C
Change of course until re-inflation	90° to 180°	90° to 180°
Maximum dive forward or roll angle	Dive or roll angle 45° to 60°	Dive or roll angle 45° to 60°
Re-inflation behaviour	Spontaneous re-inflation	Spontaneous re-inflation
Total change of course	Less than 360°	Less than 360°
Collapse on the opposite side occurs	No	No
Twist occurs	No	No
Cascade occurs	No	No
<u>Directional control with a maintained asymmetric collapse</u>	A	A
Able to keep course	Yes	Yes
180° turn away from the collapsed side possible in 10 s	Yes	Yes
Amount of control range between turn and stall or spin	More than 50 % of the symmetric control travel	More than 50 % of the symmetric control travel
<u>Trim speed spin tendency</u>	A	A
Spin occurs	No	No
<u>Low speed spin tendency</u>	A	A
Spin occurs	No	No
<u>Recovery from a developed spin</u>	A	A
Spin rotation angle after release	Stops spinning in less than 90°	Stops spinning in less than 90°
Cascade occurs	No	No
<u>B-line stall</u>	C	A
Change of course before release	Changing course less than 45°	Changing course less than 45°
Behaviour before release	Remains stable without straight span	Remains stable with straight span
Recovery	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 0° to 30°
Cascade occurs	No	No
<u>Big ears</u>	B	B

Entry procedure	Dedicated controls	Dedicated controls
Behaviour during big ears	Stable flight	Stable flight
Recovery	Spontaneous in 3 s to 5 s	Recovery through pilot action in less than a further 3 s
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 0° to 30°
Big ears in accelerated flight		
	A	B
Entry procedure	Dedicated controls	Dedicated controls
Behaviour during big ears	Stable flight	Stable flight
Recovery	Spontaneous in 3 s to 5 s	Recovery through pilot action in less than a further 3 s
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 0° to 30°
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	Stable flight
Behaviour exiting a steep spiral		
	A	A
Tendency to return to straight flight	Spontaneous exit	Spontaneous exit
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	Less than 720°, spontaneous recovery
Sink rate when evaluating spiral stability [m/s]	14	14
Alternative means of directional control		
	A	A
180° turn achievable in 20 s	Yes	Yes
Stall or spin occurs	No	No
Any other flight procedure and/or configuration described in the user's manual		
No other flight procedure or configuration described in the user's manual		