

TwinCAT 3 Motion



TF5410 | TC3 Motion Collision Avoidance

TC3 Motion Collision Avoidance is an optional package that prevents collisions when operating a number of linearly and/or translationally dependent axes with TC3 NC PTP. The underlying algorithm ensures the maintenance of a minimum distance from the previous axis. In this way, TC3 Motion Collision Avoidance actively prevents collisions when a number of motors are using e.g. the same rail. As well as active collision avoidance, TF5410 can also be used to allow axes to accumulate in a controlled way, for example when carrying out linear movements such as with XTS (eXtended Transport System).

Programming of the PLC's movement commands is based on the standard PTP motion library with an additional input "gap". For example, when using TC3 Motion Collision Avoidance, all the axes can be given the same target position. The algorithm then ensures that only the first axis actually moves to that position. The remaining axes automatically line up while maintaining their minimum distance. This means that no further programming effort is needed in order to implement a dynamic buffer in which products can accumulate.



Technical data	TF5410
Required	TC1250
Target system	Windows XP, Windows 7/8/10

Ordering information	
TF5410-0040	TC3 Motion Collision Avoidance, platform 40 (Performance)
TF5410-0050	TC3 Motion Collision Avoidance, platform 50 (Performance Plus)
TF5410-0060	TC3 Motion Collision Avoidance, platform 60 (Mid Performance)
TF5410-0070	TC3 Motion Collision Avoidance, platform 70 (High Performance)
TF5410-0080	TC3 Motion Collision Avoidance, platform 80 (Very High Performance)
TF5410-0081	TC3 Motion Collision Avoidance, platform 81 (Many-core 5...8 cores)
TF5410-0082	TC3 Motion Collision Avoidance, platform 82 (Many-core 9...16 cores)
TF5410-0083	TC3 Motion Collision Avoidance, platform 83 (Many-core 17...32 cores)
TF5410-0084	TC3 Motion Collision Avoidance, platform 84 (Many-core 33...64 cores)
TF5410-0090	TC3 Motion Collision Avoidance, platform 90 (Other)
TF5410-0091	TC3 Motion Collision Avoidance, platform 91 (Other 5...8 cores)
TF5410-0092	TC3 Motion Collision Avoidance, platform 92 (Other 9...16 cores)
TF5410-0093	TC3 Motion Collision Avoidance, platform 93 (Other 17...32 cores)
TF5410-0094	TC3 Motion Collision Avoidance, platform 94 (Other 33...64 cores)